```
=> d his nofile

     (FILE 'HOME' ENTERED AT 08:12:19 ON 24 JAN 2007)

     FILE 'HCAPLUS' ENTERED AT 08:13:24 ON 24 JAN 2007
L1             1 SEA ABB=ON  PLU=ON  US20060121709/PN

     FILE 'REGISTRY' ENTERED AT 08:13:44 ON 24 JAN 2007
L2            16 SEA ABB=ON  PLU=ON  (123-54-6/BI OR 14630-40-1/BI OR
                 14689-25-9/BI OR 25583-20-4/BI OR 26213-42-3/BI OR
                 29965-97-7/BI OR 675200-66-5/BI OR 675200-67-6/BI OR
                 675200-68-7/BI OR 675200-69-8/BI OR 675200-70-1/BI OR
                 675200-71-2/BI OR 675200-72-3/BI OR 7440-21-3/BI OR
                 7440-22-4/BI OR 7440-50-8/BI)
L3               STR
L4               STR L3
L5            12 SEA SSS SAM L4
L6           237 SEA SSS FUL L4
L7             6 SEA ABB=ON  PLU=ON  L2 AND L6
                 SAV L6 LAO569/A

     FILE 'HCAPLUS' ENTERED AT 09:23:59 ON 24 JAN 2007
L8            27 SEA ABB=ON  PLU=ON  L7

     FILE 'REGISTRY' ENTERED AT 09:24:47 ON 24 JAN 2007
L9               STR L4
L10           12 SEA SUB=L6 SSS SAM L9
L11          153 SEA SUB=L6 SSS FUL L9
L12           84 SEA ABB=ON  PLU=ON  L6 NOT L11
L13            4 SEA ABB=ON  PLU=ON  L7 NOT L11

     FILE 'HCAPLUS' ENTERED AT 09:32:29 ON 24 JAN 2007
L14            1 SEA ABB=ON  PLU=ON  L13
L15           29 SEA ABB=ON  PLU=ON  L12

     FILE 'REGISTRY' ENTERED AT 09:33:50 ON 24 JAN 2007
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L17            0 SEA ABB=ON  PLU=ON  L12 AND BIOSIS/LC
L18            0 SEA ABB=ON  PLU=ON  L12 AND EMBASE/LC
L19            0 SEA ABB=ON  PLU=ON  L12 AND DRUGU/LC


     FILE 'EMBASE, BIOSIS, MEDLINE, DRUGU, HCAPLUS, JICST-EPLUS, JAPIO,
     WPIX, SCISEARCH, LIFESCI' ENTERED AT 09:37:23 ON 24 JAN 2007
L20          170 SEA ABB=ON  PLU=ON  DOPPELT, P?/AU
L21           15 SEA ABB=ON  PLU=ON  L20 AND GAS(A) PHASE?
L22            7 SEA ABB=ON  PLU=ON  L21 AND METALLIC?

     FILE 'HCAPLUS' ENTERED AT 09:47:47 ON 24 JAN 2007
L23           28 SEA ABB=ON  PLU=ON  L15 NOT L1

     FILE 'HCAPLUS, WPIX, SCISEARCH' ENTERED AT 09:50:41 ON 24 JAN 2007
L24            4 DUP REM L1 L22 (4 DUPLICATES REMOVED)
                   ANSWERS '1-4' FROM FILE HCAPLUS
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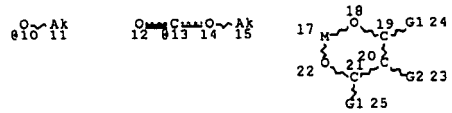

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DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
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NUMBER OF NODES IS  15

STEREO ATTRIBUTES: NONE
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L9               STR
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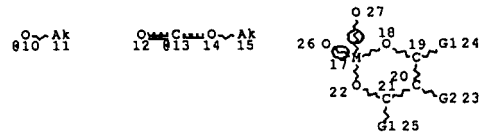

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VAR G2=10/NO2/CHO/13
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NSPEC    IS R      AT  27
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS  17

STEREO ATTRIBUTES: NONE
L11          153 SEA FILE=REGISTRY SUB=L6 SSS FUL L9
L12           84 SEA FILE=REGISTRY ABB=ON  PLU=ON  L6 NOT L11
L15           29 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L12
L23           28 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L15 NOT L1

=> d l23 1-28 ibib ed ab hitstr hitind
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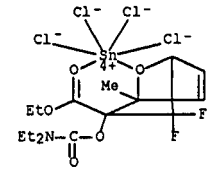
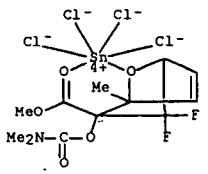
L23 ANSWER 1 OF 28 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2006:962681 HCAPLUS Full-text
DOCUMENT NUMBER: 145:505039
TITLE: Interplay of Structure and Reactivity in a Most Unusual Furan Diels-Alder Reaction
AUTHOR(S): Griffith, Gerry A.; Hillier, Ian H.; Moralee, Andrew C.; Percy, Jonathan M.; Roig, Ricard; Vincent, Mark A.
CORPORATE SOURCE: Department of Chemistry, University of Leicester, Leicester, LE1 7RH, UK
SOURCE: Journal of the American Chemical Society (2006), 128(40), 13130-13141
CODEN: JACSAT; ISSN: 0002-7863
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 19 Sep 2006
AB Difluorinated alkenoate Et 3,3-difluoro-2-(N,N-diethylcarbamoyloxy)-2-propenoate reacts rapidly and in high yield with furan and a range of substituted furans in the presence of a tin(IV) catalyst. Nonfluorinated congener 2-(N,N-diethylcarbamoyloxy)-2-propenoate fails to react at all under the same conditions. These reactions were explored using d. functional theory (DFT) calcns. They reveal a highly polar transition state, which is stabilized by the Lewis acid catalyst SnCl4 and by polar solvents. In the presence of both catalyst and solvent, a two-step reaction is predicted, corresponding to the stepwise formation of the two new carbon-carbon bonds via transition states which have similar energies in all cases. Exptl. observations of the lack of reaction of the nonfluorinated dienophile, the stereochem. outcomes, and the rate acceleration accompanying furan methylation are all well predicted by calcns. The calculated free energy barriers generally correlate well with measured reaction rates, supporting a reaction mechanism in which zwitterionic character is developed strongly. An in situ ring opening reaction of exo-cycloadduct Et exo-2-(N,N-diethylcarbamoyloxy)-3,3-difluoro-7- oxabicyclo[2.2.1]hept-5-enyl-2-endo-carboxylate, which gave cyclic carbonate Et 4,4-difluoro-5-hydroxy-2-oxo-5,7a-dihydro-4H-benzo[1,3]dioxole-3a-carboxylate by a Curtin-Hammett mechanism, also was examined Substantial steric opposition to Lewis acid binding prevents carbonate formation from 2-substituted furans.
IT **914986-22-4 914986-28-0**
(mechanistic reaction intermediate; interplay of structure and reactivity in unusual furan Diels-Alder reaction)
RN 914986-22-4 HCAPLUS
CN INDEX NAME NOT YET ASSIGNED



RN 914986-28-0 HCAPLUS

CN INDEX NAME NOT YET ASSIGNED



CC 22-3 (Physical Organic Chemistry)

IT 914986-19-9 914986-20-2 914986-21-3 **914986-22-4**
914986-23-5 914986-25-7 914986-26-8 914986-27-9
914986-28-0 914986-29-1 914986-30-4 914986-37-1
914986-38-2 914986-39-3 914986-40-6 914986-41-7
(mechanistic reaction intermediate; interplay of structure and reactivity in unusual furan Diels-Alder reaction)

REFERENCE COUNT: 118 THERE ARE 118 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 2 OF 28 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2006:918264 HCAPLUS Full-text
DOCUMENT NUMBER: 145:324594
TITLE: Organic electroluminescent device, display and illuminating device
INVENTOR(S): Sugita, Shuichi; Kita, Hiroshi; Taka, Hideo
PATENT ASSIGNEE(S): Konica Minolta Holdings, Inc., Japan
SOURCE: PCT Int. Appl., 62pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006092943	A1	20060908	WO 2006-JP302327	20060210
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
JP 2006279007	A	20061012	JP 2005-169228	20050609
PRIORITY APPLN. INFO.:			JP 2005-57051 A	20050302

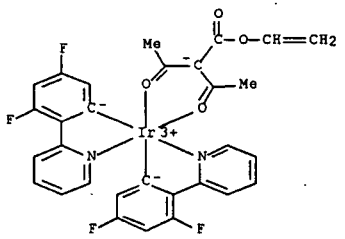
ED Entered STN: 08 Sep 2006

AB Disclosed is an organic electroluminescent device of multilayer structure which emits light at good luminous efficiency while having only a few dark spots and long life. Also disclosed are a display and an illuminating device each using such an organic electroluminescent device. Specifically disclosed is an organic electroluminescent device comprising a cathode and an anode arranged on a substrate, and a plurality of organic layers arranged between the cathode and the anode. This organic electroluminescent device is characterized in that at least one of the organic layers is a first organic layer which contains an organic mol. having not more than 10 repeating units and obtained by applying and polymerizing a compound having at least one polymerizable group.

IT **909119-87-5**
(organic electroluminescent device, display and illuminating device)

RN 909119-87-5 HCAPLUS

CN Iridium, bis[3,5-difluoro-2-(2-pyridinyl-κN)phenyl-κC][ethenyl 2-(acetyl-κO)-3-(oxo-κO)butanoato]-(9CI) (CA INDEX NAME)



CC 73-11 (Optical, Electron, and Mass Spectroscopy and Other Related Properties)
Section cross-reference(s): 74

IT 376367-93-0 693794-98-8 800395-01-1 **909119-87-5**
(organic electroluminescent device, display and illuminating device)

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 3 OF 28 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2006:733092 HCAPLUS Full-text
DOCUMENT NUMBER: 145:198433
TITLE: Organic electroluminescent material for organic electroluminescent device, display and lighting apparatus
INVENTOR(S): Sekine, Noboru; Oshiyama, Tomohiro; Nishizeki, Masato
PATENT ASSIGNEE(S): Konica Minolta Holdings, Inc., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 77 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2006193546	A	20060727	JP 2005-3563	20050111
PRIORITY APPLN. INFO.:			JP 2005-3563	20050111

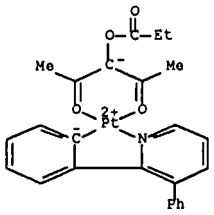
ED Entered STN: 27 Jul 2006

AB The invention relates to an organic electroluminescent material for an organic electroluminescent device, display and a lighting apparatus, comprising a metal complex represented by I [M = metal atom; Z11 and Z12 = O, N, and S; R11-13 = substituted group; n1 = integer 1-3].

IT **902769-64-6 902769-69-1**
(organic electroluminescent material for organic electroluminescent device, display and lighting apparatus)

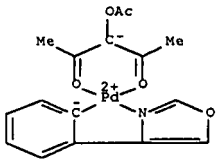
RN 902769-64-6 HCAPLUS

CN Platinum, [3-(1-oxopropoxy)-2,4-pentanedionato-κO,κO'][2-(3-phenyl-2-pyridinyl-κN)phenyl-κC]- (9CI) (CA INDEX NAME)



RN 902769-69-1 HCAPLUS

CN Palladium, [3-(acetyloxy)-2,4-pentanedionato-κO,κO'][2-(4-oxazolyl-κN3)phenyl-κC]-, (SP-4-3)- (9CI) (CA INDEX NAME)



CC 73-5 (Optical, Electron, and Mass Spectroscopy and Other Related Properties)

IT 902769-60-2 902769-61-3 902769-62-4 902769-63-5
902769-64-6 902769-65-7 902769-66-8 902769-67-9
902769-68-0 **902769-69-1** 902769-70-4 902769-71-5

(organic electroluminescent material for organic electroluminescent device, display and lighting apparatus)

L23 ANSWER 4 OF 28 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2003:989493 HCAPLUS Full-text

DOCUMENT NUMBER: 140:226183

TITLE: Synthesis and liquid crystal behaviors of 2,4-dioxo-3-pentyl 4-decyloxycinnamate rhodium(I) complexes

AUTHOR(S): Han, Jie; Zhang, Liang-fu; Wan, Wen

CORPORATE SOURCE: Chengdu Institute of Organic Chemistry, Chinese Academy of Sciences, Sichuan, 610041, Peop. Rep. China

SOURCE: Chinese Journal of Chemistry (2003), 21(11), 1521-1524
CODEN: CJOCEV; ISSN: 1001-604X

PUBLISHER: Science Press

DOCUMENT TYPE: Journal

LANGUAGE: English

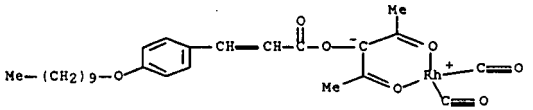
ED Entered STN: 19 Dec 2003

AB The title complexes were synthesized by the reaction of [RhCl(CO)2]2 or [RhCl(COD)]2 (COD = 1,5-cyclooctadiene) with the organic ligand 2,4-dioxo-3-pentyl 4-decyloxycinnamate. The complex based on dicarbonylrhodium(I) shows a nematic phase, while the complex containing Rh(I) bound to a COD ligand is a nonmesogen. The relation between mol. structures and liquid crystal behavior also is discussed by computer-aided mol. modeling.

IT **664362-37-2P**
(preparation and liquid crystal properties of)

RN 664362-37-2 HCAPLUS

CN Rhodium, [1-(acetyl-κO)-2-(oxo-κO)propyl (2E)-3-[4-(decyloxy)phenyl]-2-propenoato]dicarbonyl-, (SP-4-2)- (9CI) (CA INDEX NAME)



IT **664362-39-4P**
(preparation and thermal behavior of)

RN 664362-39-4 HCAPLUS

CN Rhodium, [1-(acetyl-κO)-2-(oxo-κO)propyl (2E)-3-[4-(decyloxy)phenyl]-2-propenoato][(1,2,5,6-η)-1,5-cyclooctadiene]- (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CC 75-11 (Crystallography and Liquid Crystals)
Section cross-reference(s): 29, 78

IT **664362-37-2P**
(preparation and liquid crystal properties of)

IT **664362-39-4P**
(preparation and thermal behavior of)

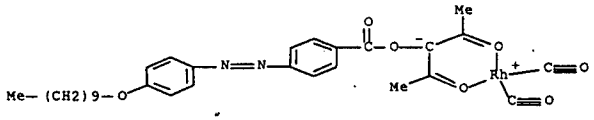
REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR

THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 5 OF 28 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:326235 HCAPLUS Full-text
DOCUMENT NUMBER: 139:109034
TITLE: Synthesis and mesomorphic properties of γ-substituted β-diketones and their dicarbonylrhodium(I) complexes
AUTHOR(S): Han, Jie; Zhang, Liang Fu; Wan, Wen
CORPORATE SOURCE: Chengdu Institute of Organic Chemistry, Chinese Academy of Sciences, Chengdu, 610041, Peop. Rep. China
SOURCE: Journal of Organometallic Chemistry (2003), 672(1-2), 86-93
CODEN: JORCAI; ISSN: 0022-328X
PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 29 Apr 2003
AB Five series of 3-(C10H21O-Ph-X-Ph-Y-) substituted pentane-2,4-diones and their dicarbonylrhodium(I) complexes, namely, series 1: X = -CH:CHCOO- and Y=-COO-, series 2: X = -CH:CHCOO- and Y=-CH:CHCOO-, series 3: X = -COO- and Y=-CH:CHCOO-, series 4: X = -CH2O- and Y=-COO-, series 5: X = -N:N- and Y=-COO-, were synthesized, their mesogenic properties were studied using a Nikon polarizing microscope and DSC. It is found the β-diketones 1a-3a, 5a and the complexes 1b-3b exhibit liquid crystal behaviors. The effect of the bridging groups of X and Y on the mesogenic properties of the ligands and the complexes was explored.

IT **561013-39-6P**
(preparation and phase transition temperature of)

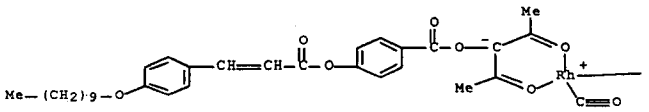
RN 561013-39-6 HCAPLUS
CN Rhodium, [1-(acetyl-κO)-2-(oxo-κO)propyl 4-[(1E)-[4-(decyloxy)phenyl]azo]benzoato]dicarbonyl-, (SP-4-2)- (9CI) (CA INDEX NAME)



IT **220218-46-2P 561013-36-3P 561013-37-4P 561013-38-5P**
(preparation, liquid crystal properties and UV-Vis spectral crystallog. data and atomic coordinates are given. of)

RN 220218-46-2 HCAPLUS
CN Rhodium, [1-(acetyl-κO)-2-(oxo-κO)propyl 4-[[(2E)-3-[4-(decyloxy)phenyl]-1-oxo-2-propenyl]oxy]benzoato]dicarbonyl-, (SP-4-2)- (9CI) (CA INDEX NAME)

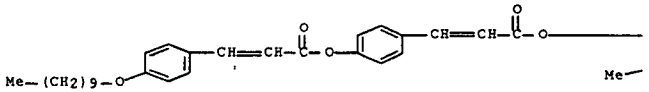
PAGE 1-A



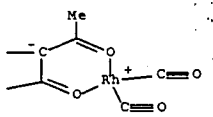
PAGE 1-B

RN 561013-36-3 HCAPLUS
CN Rhodium, [4-[(1E)-3-[1-(acetyl-κO)-2-(oxo-κO)propoxy]-3-oxo-1-propenyl]phenyl (2E)-3-[4-(decyloxy)phenyl]-2-propenoato]dicarbonyl-, (SP-4-2)- (9CI) (CA INDEX NAME)

PAGE 1-A

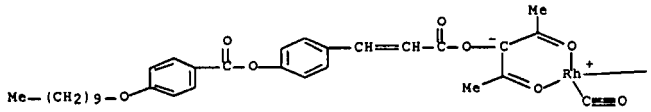


PAGE 1-B



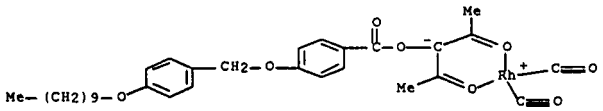
RN 561013-37-4 HCAPLUS
CN Rhodium, [4-[(1E)-3-[1-(acetyl-κO)-2-(oxo-κO)propoxy]-3-oxo-1-propenyl]phenyl 4-(decyloxy)benzoato]dicarbonyl-, (SP-4-2)- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

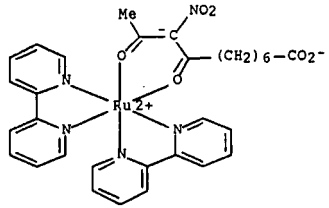
RN 561013-38-5 HCAPLUS
CN Rhodium, [1-(acetyl-κO)-2-(oxo-κO)propyl 4-[[4-(decyloxy)phenyl]methoxy]benzoato]dicarbonyl-, (SP-4-2)- (9CI) (CA INDEX NAME)



CC 75-11 (Crystallography and Liquid Crystals)
Section cross-reference(s): 78
IT **561013-39-6P**
(preparation and phase transition temperature of)
IT 220218-35-9P **220218-46-2P** 561013-32-9P 561013-33-0P 561013-34-1P 561013-35-2P **561013-36-3P** **561013-37-4P** **561013-38-5P**
(preparation, liquid crystal properties and UV-Vis spectral crystallog. data and atomic coordinates are given. of)
REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 6 OF 28 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2002:80887 HCAPLUS Full-text
DOCUMENT NUMBER: 136:291249
TITLE: Redox-active metal-containing nucleotides: Synthesis, tunability, and enzymatic incorporation into DNA
AUTHOR(S): Weizman, Haim; Tor, Yitzhak
CORPORATE SOURCE: Department of Chemistry and Biochemistry,

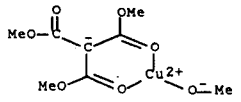
University of California, San Diego, La Jolla, CA, 92093-0358, USA
SOURCE: Journal of the American Chemical Society (2002), 124(8), 1568-1569
CODEN: JACSAT; ISSN: 0002-7863
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 31 Jan 2002
AB Novel redox-active DNA labeling tags with tunable electrochem. potentials are modularly synthesized using (a) bis-substituted Ru2+ or Os2+ precursors (R2bpy)2ML2, (b) substituted 2,4-pentanediones or hydroxamic acids bearing a functionalized linker, and (c) modified nucleotides. DNA polymerase efficiently incorporates the metal-containing nucleotide triphosphate into DNA oligonucleotides.
IT **406947-60-2P**
(redox-active metal-containing nucleotides and synthesis, tunability, and enzymic incorporation into DNA)
RN 406947-60-2 HCAPLUS
CN Ruthenium, bis(2,2'-bipyridine-κN1,κN1')[9-nitro-8,10-di(oxo-κO)undecanoato(2-)]-, (OC-6-33)- (9CI) (CA INDEX NAME)



CC 9-14 (Biochemical Methods)
IT 406947-52-2P 406947-55-5P 406947-57-7P **406947-60-2P** 406947-63-5P 406947-65-7P 406947-66-8P 406947-67-9P 406947-68-0P 406947-70-4P
(redox-active metal-containing nucleotides and synthesis, tunability, and enzymic incorporation into DNA)
REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 7 OF 28 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2001:160846 HCAPLUS Full-text
DOCUMENT NUMBER: 135:28213
TITLE: Synthesis and structural characterization of tricarbomethoxymethanate complexes of copper(II) and barium(II) and evaluation of their suitability for MOCVD applications
AUTHOR(S): Baxter, David V.; Caulton, Kenneth G.; Chiang, Wen-Chung; Chisholm, Malcolm H.; DiStasi, Vincent F.; Dutremez, Sylvain G.; Martin, James D.; Streib, William E.

CORPORATE SOURCE: Department of Physics, Department of Chemistry and Molecular Structure Center, Indiana University, Bloomington, IN, 47405-7102, USA
SOURCE: New Journal of Chemistry (2001), 25(3), 400-407
CODEN: NJCHE5; ISSN: 1144-0546
PUBLISHER: Royal Society of Chemistry
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 135:28213
ED Entered STN: 07 Mar 2001
AB The reaction between Cu(OCH3)2 and HL [L = -C(CO2CH3)3] in THF gives a mixture of two products, CuL(OCH3) and CuL2(THF)2. CuL(OCH3) was characterized by elemental anal., IR spectroscopy and thermal decomposition studies, and its insoly. in THF, at room temperature, suggests that it may be polymeric. The solid state structure of CuL2(THF)2 was established via a single-crystal x-ray diffraction anal. This complex has a tetragonally distorted trans-disubstituted octahedral structure with L binding like a conventional bidentate β-diketonate ligand; the central CO2CH3 group of each L is not coordinated. CuL2(THF)2 readily loses the two THF mols. bound to the Cu(II) center upon drying in a stream of dinitrogen to produce THF-free CuL2. Alternatively, THF-free CuL2 can be prepared by the reaction of CuL(OCH3) with HL in refluxing toluene. X-ray crystallog. shows that CuL2 is a polymeric solid composed of a planar Cu(η2-L)2 repeat unit in which the central CO2CH3 group of each L binds weakly to the Cu(II) center of a neighboring unit along a "stepped" (displaced) stack of CuO4 units. The reaction between elemental barium and HL in THF requires activation with NH3(g). The product is a white solid of empirical formula BaL2·0.36THF. It was characterized by elemental anal., 1H NMR, 13C{1H} NMR, and IR spectroscopies, and thermal decomposition studies. It is insol. in common laboratory solvents but soluble in strong Lewis bases such as pyridine, DMSO, and hexamethylphosphoramide (HMPA). The product resulting from the depolymn. of BaL2·0.36THF with HMPA was characterized via a single-crystal x-ray diffraction anal. It is a dimer of empirical formula Ba2L4(HMPA)4. It consists of two BaL2(HMPA)2 fragments linked together, in a centrosym. fashion, by two μ2,η3-[-C(CO2CH3)3] ligands; this is made possible using the donor power of the pendant C(O)OCH3 group not used in CuL2(THF)2. The remaining two -C(CO2CH3)3 ligands are also bidentate but are nonbridging, and the four HMPA mols. are bonded through oxygen, resulting in a coordination number of seven for each barium. CuL2 is volatile and sublimes upon heating the amorphous material obtained from spontaneous desolvation of CuL2(THF)2, or polymeric CuL2, or CuL(OCH3) under high vacuum. The barium complexes are not volatile. Metallic copper was obtained upon heating the Cu(II) complexes to 1000° in a stream of argon, and formation of CuO results when these complexes are decomposed in the presence of oxygen. Thermal decomposition of BaL2·0.36THF and Ba2L4(HMPA)4 was carried out under argon and O2-Ar atmospheres; residues containing varying amts. of BaO, BaO2 and BaCO3 were obtained depending on the exptl. conditions.
IT **342805-80-5P**
(polymeric; preparation, thermal decomposition and reaction with tri-Me methanetricarboxylate)
RN 342805-80-5 HCAPLUS
CN Copper, methoxy(trimethyl methanetricarboxylato-κO''',κO'''')- (9CI) (CA INDEX NAME)

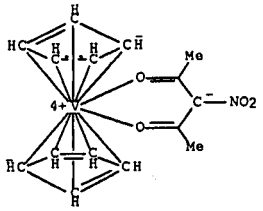


CC 78-7 (Inorganic Chemicals and Reactions)
Section cross-reference(s): 75
IT **342805-80-5P**
(polymeric; preparation, thermal decomposition and reaction with tri-Me methanetricarboxylate)
REFERENCE COUNT: 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 8 OF 28 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2001:94971 HCAPLUS Full-text
DOCUMENT NUMBER: 135:15524
TITLE: Induction of aerobic peroxidation of liposomal membranes by bis(cyclopentadienyl)-vanadium(IV) (acetylacetonate) complexes
AUTHOR(S): Kotchevar, A. T.; Ghosh, P.; DuMez, D. D.; Uckun, F. M.
CORPORATE SOURCE: Department of Chemistry, Parker Hughes Institute, St. Paul, MN, 55113, USA
SOURCE: Journal of Inorganic Biochemistry (2001), 83(2-3), 151-160
CODEN: JIBIDJ; ISSN: 0162-0134
PUBLISHER: Elsevier Science Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 135:15524
ED Entered STN: 08 Feb 2001
AB The ability of bis(cyclopentadienyl)-vanadium(IV) (acetylacetonate) (1) to initiate oxygen-dependent lipid peroxidn. in zwitterionic liposomal membranes was examined in detail. A comparison of the rates of the lipid peroxidn. reaction demonstrated that the electron-donating capacity of the substituted acetylacetonate ligand significantly influences the rate of reaction. An increase in the rate of lipid peroxidn. correlated to a decrease in the VIV/VV redox potential. Notably, lipid peroxidn. initiated with 1 proceeded without the formation of radicals as shown by EPR spin trap techniques. In contrast, lipid peroxidn. initiated with non-chelated bis(cyclopentadienyl)-vanadium(IV) dichloride (6) was associated with the production of radicals under similar exptl. conditions. There also was a significant pH effect on the extent of peroxidn. initiated with 6 vs. the reaction initiated with 1. The mode of action of 1 likely involves the activation of mol. oxygen by the vanadium(IV) center followed by allylic hydrogen atom abstraction from the lipid.
IT **342635-47-6P**
(preparation of and induction of aerobic peroxidn. of liposomal membranes by bis(cyclopentadienyl)-vanadium(IV) (acetylacetonate) complexes)
RN 342635-47-6 HCAPLUS
CN Vanadium(1+), bis(η5-2,4-cyclopentadien-1-yl)(3-nitro-2,4-pentanedionato-κO,κO')-, salt with trifluoromethanesulfonic acid (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 296778-85-3
CMF C15 H16 N O4 V
CCI CCS



CM 2

CRN 37181-39-8
CMF C F3 O3 S

CC 6-1 (General Biochemistry)
Section cross-reference(s): 67, 78
IT 342635-40-9P 342635-41-0P 342635-43-2P 342635-44-3P
342635-47-6P
(preparation of and induction of aerobic peroxidn. of liposomal membranes by bis(cyclopentadienyl)-vanadium(IV) (acetylacetonate) complexes)
REFERENCE COUNT: 60 THERE ARE 60 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 9 OF 28 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2000:688057 HCAPLUS Full-text
DOCUMENT NUMBER: 133:271635
TITLE: Synthesis and structure of metallocene compounds and their interactions with lipid membranes
INVENTOR(S): Ghosh, Phalguni; Kotchevar, Ann T.; Dumez, Darin D.; Ghosh, Sutapa; Peiterson, John T.; Uckun, Fatih M.
PATENT ASSIGNEE(S): Parker Hughes Institute, USA
SOURCE: PCT Int. Appl., 92 pp.
CODEN: PIXXD2

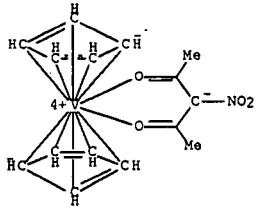
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000056300	A2	20000928	WO 2000-US7067	20000317
WO 2000056300	A3	20010104		

W: AE, AG, AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EE, EE, ES, FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 1999-125144P P 19990319

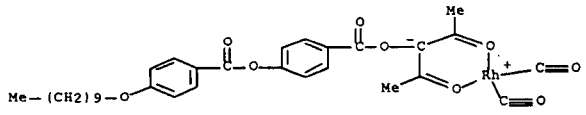
OTHER SOURCE(S): MARPAT 133:271635
ED Entered STN: 29 Sep 2000
AB Metallocene compds. useful for modulating the permeability of a lipid membrane, i.e. (Cp)2MR1R2 where M is a metal ion, Cp is unsubstituted or substituted cyclopentadienyl, and R1and R2 are together a bidentate ligand, are described. Some suitable compds. have a unique structural requirement, particularly the hydrophobicity, planarity, and rigidity of the coordinated ancillary ligands, which alter the membrane of intercalation. Some suitable compds. can modulate the permeability of a lipid membrane through oxidation of lipids without generating hydroxyl radicals. Addnl., methods of using such compds. and pharmaceutical compns. including such compds. are described.
IT **296778-85-3**
(synthesis and structure of metallocene compds. and their interactions with lipid membranes)
RN 296778-85-3 HCAPLUS
CN Vanadium(1+), bis(η5-2,4-cyclopentadien-1-yl)(3-nitro-2,4-pentanedionato-κO,κO')- (9CI) (CA INDEX NAME)



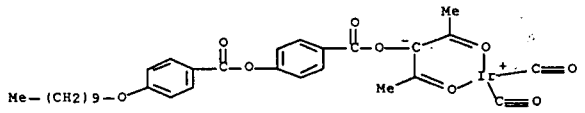
IC ICM A61K031-00
CC 63-5 (Pharmaceuticals)
Section cross-reference(s): 78
IT 75475-33-1 75475-35-3 296778-82-0 296778-83-1 296778-84-2

296778-85-3
(synthesis and structure of metallocene compds. and their interactions with lipid membranes)

L23 ANSWER 10 OF 28 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1999:334638 HCAPLUS Full-text
DOCUMENT NUMBER: 131:82090
TITLE: Rhodium(I) and Iridium(I) Complexes Containing β-Diketonate or Pyrazole Ligands. Liquid Crystal and Nonlinear Optical Properties
AUTHOR(S): Barbera, Joaquin; Elduque, Anabel; Gimenez, Raquel; Lahoz, Fernando J.; Lopez, Jose A.; Oro, Luis A.; Serrano, Jose Luis; Villacampa, Belen; Villalba, Julio
CORPORATE SOURCE: Departamento de Quimica Organica Departamento de Quimica Inorganica and Departamento de Fisica de la Materia Condensada Instituto de Ciencia de Materiales de Aragon, Universidad de Zaragoza-Consejo Superior de Investigaciones Cientificas, Zaragoza, 50009, Spain
SOURCE: Inorganic Chemistry (1999), 38(13), 3085-3092
CODEN: INOCAJ; ISSN: 0020-1669
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 02 Jun 1999
AB Square-planar Rh or Ir n-decyloxy-β-diketonate complexes [M(β-diketonate)(CO)2] (M = Rh (1-3) or Ir (4-6)) and pyrazole-Rh derivs. [RhCl(CO)2(pyrazole)] (7-9) were prepared and their liquid-crystalline properties studied. Compds. 1 and 4 show monotropic smectic A phases, and complex 7 shows a monotropic nematic phase. The behavior of the m.ps. seems to be related to the X group directly bonded at the 3-position of the β-diketonate ligand (1-6) or at the 4-position of the pyrazole ring (7-9). When X = OOC higher m.ps. were obtained. Two different polymorphs, red (M = Rh) or blue (M = Ir) and yellow (M = Rh, Ir), were obtained for complexes 1, 4, and 6. The yellow form for compound 4 (C31H35IrO9·MeOH, monoclinic system, space group P21/c with a 26.991(6), b 4.0093(8), c 31.169(6) Å, β 104.950(13)°, and Z = 4) also was characterized by an x-ray single-crystal diffraction experiment to explain the influence of the packing arrangement in the formation of different polymorphs. Addnl., measurements of the 1st-order optical hyperpolarizability (β) of the Rh compds. and some of the precursor ligands using the EFISH technique also were performed.
IT **207297-58-3P 228703-63-7P**
(preparation, nonlinear optics, thermochromism, and mesomorphism in iridium and rhodium decyloxy-type diketonate and pyrazolate complexes)
RN 207297-58-3 HCAPLUS
CN Rhodium, [4-[[1-(acetyl-κO)-2-(oxo-κO)propoxy]carbonyl]phenyl 4-(decyloxy)benzoato]dicarbonyl-, (SP-4-2)- (9CI) (CA INDEX NAME)



RN 228703-63-7 HCAPLUS
CN Iridium, [4-[[1-(acetyl-κO)-2-(oxo-κO)propoxy]carbonyl]phenyl 4-(decyloxy)benzoato]dicarbonyl-, (SP-4-2)- (9CI) (CA INDEX NAME)



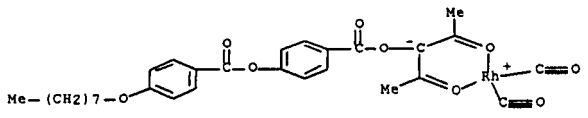
CC 78-7 (Inorganic Chemicals and Reactions)
Section cross-reference(s): 73, 75
IT **207297-58-3P** 228703-58-0P 228703-61-5P
228703-63-7P 228703-64-8P 228703-65-9P 228703-66-0P
228703-67-1P
(preparation, nonlinear optics, thermochromism, and mesomorphism in iridium and rhodium decyloxy-type diketonate and pyrazolate complexes)
REFERENCE COUNT: 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 11 OF 28 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1999:301433 HCAPLUS Full-text
Correction of: 1998:332875
DOCUMENT NUMBER: 130:304346
Correction of: 129:60842
TITLE: Calamitic organometallic liquid crystals with terminal material. Syntheses and liquid crystal properties of dicarbonylrhodium(I) β-diketonate complexes
AUTHOR(S): Wan, Wen; Guang, Wen-Jie; Zhao, Ke-Qin; Zheng, Wei-Zhong; Zhang, Liang-Fu
CORPORATE SOURCE: Chengdu Institute of Organic Chemistry, Academia Sinica, Chengdu, 610041, Peop. Rep. China
SOURCE: Journal of Organometallic Chemistry (1998), 557(2), 157-161
CODEN: JORCAI; ISSN: 0022-328X
PUBLISHER: Elsevier Science S.A.
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 18 May 1999
AB Novel organometallic complexes based on γ-substituted β-diketone ligands with terminal metal Rh(I) were prepared by reaction of the ligands with [Rh(CO)2(μ-Cl)]2. The mesomorphism of the ligands and complexes was studied using DSC and polarizing microscopy. Nonmesogenic ligands with n = 7, 8, 9, 10, 11 can form liquid crystalline phase by direct coordination to metal. The effect of the terminal C number on the mesomorphism also is discussed.
IT **207297-52-7P 207297-58-3P 207297-61-8P**
207297-63-0P 208767-58-2P 208767-60-6P
208767-61-7P

(preparation and liquid crystal properties of)

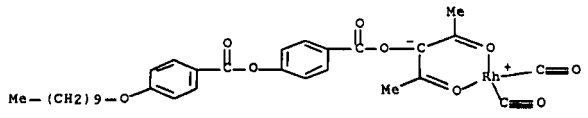
RN 207297-52-7 HCAPLUS

CN Rhodium, [4-[[1-(acetyl-κO)-2-(oxo-κO)propoxy]carbonyl]phe nyl 4-(octyloxy)benzoato]dicarbonyl-, (SP-4-2)- (9CI) (CA INDEX NAME)



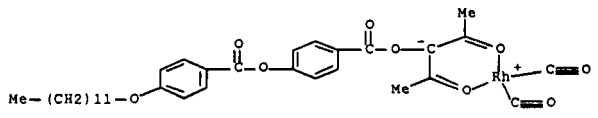
RN 207297-58-3 HCAPLUS

CN Rhodium, [4-[[1-(acetyl-κO)-2-(oxo-κO)propoxy]carbonyl]phe nyl 4-(decyloxy)benzoato]dicarbonyl-, (SP-4-2)- (9CI) (CA INDEX NAME)



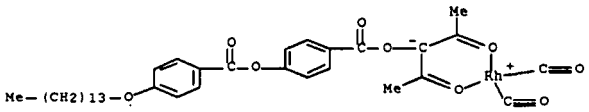
RN 207297-61-8 HCAPLUS

CN Rhodium, [4-[[1-(acetyl-κO)-2-(oxo-κO)propoxy]carbonyl]phe nyl 4-(dodecyloxy)benzoato]dicarbonyl-, (SP-4-2)- (9CI) (CA INDEX NAME)



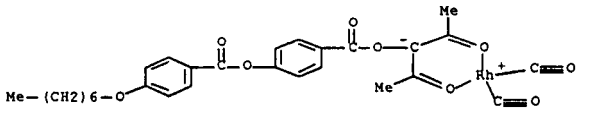
RN 207297-63-0 HCAPLUS

CN Rhodium, [4-[[1-(acetyl-κO)-2-(oxo-κO)propoxy]carbonyl]phe nyl 4-(tetradecyloxy)benzoato]dicarbonyl-, (SP-4-2)- (9CI) (CA INDEX NAME)



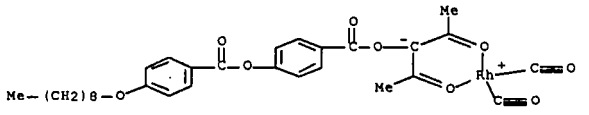
RN 208767-58-2 HCAPLUS

CN Rhodium, [4-[[1-(acetyl-κO)-2-(oxo-κO)propoxy]carbonyl]phe nyl 4-(heptyloxy)benzoato]dicarbonyl-, (SP-4-2)- (9CI) (CA INDEX NAME)



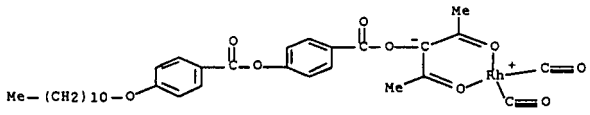
RN 208767-60-6 HCAPLUS

CN Rhodium, [4-[[1-(acetyl-κO)-2-(oxo-κO)propoxy]carbonyl]phe nyl 4-(nonyloxy)benzoato]dicarbonyl-, (SP-4-2)- (9CI) (CA INDEX NAME)



RN 208767-61-7 HCAPLUS

CN Rhodium, [4-[[1-(acetyl-κO)-2-(oxo-κO)propoxy]carbonyl]phe nyl 4-(undecyloxy)benzoato]dicarbonyl-, (SP-4-2)- (9CI) (CA INDEX NAME)



CC 75-11 (Crystallography and Liquid Crystals)

Section cross-reference(s): 78

IT **207297-52-7P 207297-58-3P 207297-61-8P 207297-63-0P 208767-58-2P 208767-60-6P 208767-61-7P**
(preparation and liquid crystal properties of)

REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

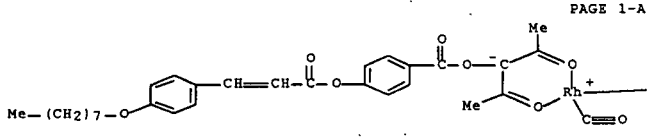
L23 ANSWER 12 OF 28 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1999:36766 HCAPLUS Full-text
DOCUMENT NUMBER: 130:160904
TITLE: Calamitic organometallic liquid crystals of β-diketonate dicarbonylrhodium(I) complexes
AUTHOR(S): Wan, Wen; Zhao, Ke-Qin; Guang, Wen-Jie; Wang, Chun-Yan; Zhang, Liang-Fu
CORPORATE SOURCE: Chengdu Institute of Organic Chemistry, Academia Sinica, Chengdu, 610041, Peop. Rep. China
SOURCE: Molecular Crystals and Liquid Crystals Science and Technology, Section A: Molecular Crystals and Liquid Crystals (1998), 317, 83-91
CODEN: MCLCE9; ISSN: 1058-725X
PUBLISHER: Gordon & Breach Science Publishers
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 20 Jan 1999

AB New rodlike organometallic complexes based on the β-diketone ligands with terminal metal were synthesized. The mesomorphism of the ligands and complexes was studied using DSC and polarizing microscopy. Most of the complexes display nematic mesogenic behavior identically with that exhibited by the ligands. The effect of the C number of the terminal chain on the mesomorphism is discussed.

IT **202209-35-6P 220218-42-8P 220218-45-1P 220218-46-2P 220218-48-4P 220218-49-5P**
(preparation and liquid crystal properties of)

RN 202209-35-6 HCAPLUS
CN Rhodium, [1-(acetyl-κO)-2-(oxo-κO)propyl 4-[[(2E)-3-[4-(octyloxy)phenyl]-1-oxo-2-propenyl]oxy]benzoato]dicarbonyl-, (SP-4-2)- (9CI) (CA INDEX NAME)

PAGE 1-A

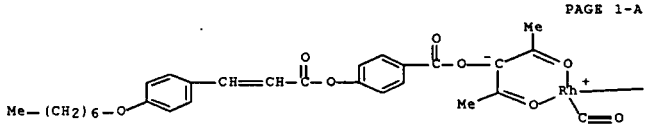


PAGE 1-B

—C≡O

RN 220218-42-8 HCAPLUS
CN Rhodium, [1-(acetyl-κO)-2-(oxo-κO)propyl 4-[[(2E)-3-[4-(heptyloxy)phenyl]-1-oxo-2-propenyl]oxy]benzoato]dicarbonyl-, (SP-4-2)- (9CI) (CA INDEX NAME)

PAGE 1-A

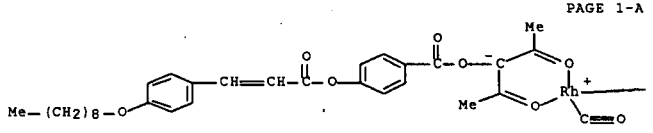


PAGE 1-B

—C≡O

RN 220218-45-1 HCAPLUS
CN Rhodium, [1-(acetyl-κO)-2-(oxo-κO)propyl 4-[[(2E)-3-[4-(nonyloxy)phenyl]-1-oxo-2-propenyl]oxy]benzoato]dicarbonyl-, (SP-4-2)- (9CI) (CA INDEX NAME)

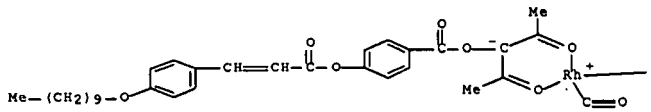
PAGE 1-A



PAGE 1-B

RN 220218-46-2 HCAPLUS
CN Rhodium, [1-(acetyl-κO)-2-(oxo-κO)propyl 4-[[(2E)-3-[4-(decyloxy)phenyl]-1-oxo-2-propenyl]oxy]benzoato]dicarbonyl-, (SP-4-2)- (9CI) (CA INDEX NAME)

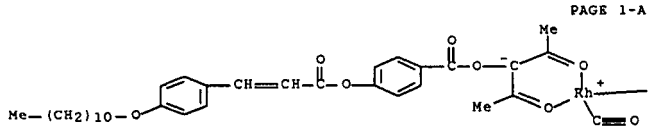
PAGE 1-A



PAGE 1-B

RN 220218-48-4 HCAPLUS
CN Rhodium, [1-(acetyl-κO)-2-(oxo-κO)propyl 4-[[(2E)-1-oxo-3-[4-(undecyloxy)phenyl]-2-propenyl]oxy]benzoato]dicarbonyl-, (SP-4-2)- (9CI) (CA INDEX NAME)

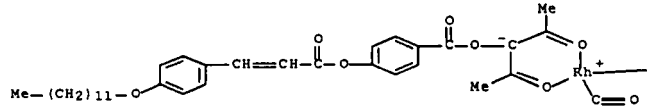
PAGE 1-A



PAGE 1-B

RN 220218-49-5 HCAPLUS
CN Rhodium, [1-(acetyl-κO)-2-(oxo-κO)propyl 4-[[(2E)-3-[4-(dodecyloxy)phenyl]-1-oxo-2-propenyl]oxy]benzoato]dicarbonyl-, (SP-4-2)- (9CI) (CA INDEX NAME)

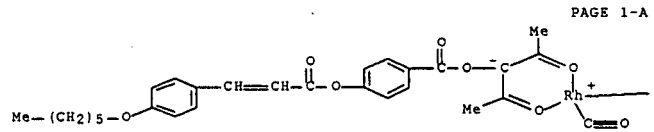
PAGE 1-A



PAGE 1-B

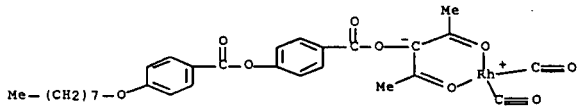
IT **220218-41-7P**
(preparation and thermal behavior of)
RN 220218-41-7 HCAPLUS
CN Rhodium, [1-(acetyl-κO)-2-(oxo-κO)propyl 4-[[(2E)-3-[4-(hexyloxy)phenyl]-1-oxo-2-propenyl]oxy]benzoato]dicarbonyl-, (SP-4-2)- (9CI) (CA INDEX NAME)

PAGE 1-A

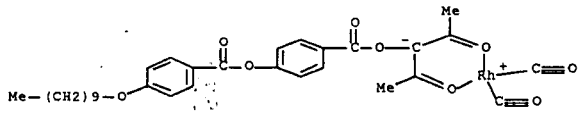


CC 75-11 (Crystallography and Liquid Crystals)
Section cross-reference(s): 25, 78
IT 202209-34-5P **202209-35-6P** 220218-28-0P 220218-30-4P
220218-33-7P 220218-35-9P 220218-37-1P 220218-39-3P
220218-42-8P 220218-45-1P 220218-46-2P
220218-48-4P 220218-49-5P
(preparation and liquid crystal properties of)
IT **220218-41-7P**
(preparation and thermal behavior of)
REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

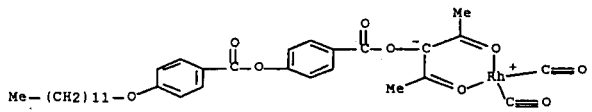
L23 ANSWER 13 OF 28 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1998:332875 HCAPLUS Full-text
DOCUMENT NUMBER: 129:60842
TITLE: Calamitic organometallic liquid crystals with terminal metal. Syntheses and liquid crystal properties of dicarbonylrhodium(I) β-diketonate complexes
AUTHOR(S): Wan, Wen; Guang, Wen-Jie; Zhao, Ke-Qin; Zheng, Wei-Zhong; Liang-Fu Zhang
CORPORATE SOURCE: Chengdu Institute of Organic Chemistry, Academia Sinica, Chengdu, 610041, Peop. Rep. China
SOURCE: Journal of Organometallic Chemistry (1998), 557(2), 157-161
CODEN: JORCAI; ISSN: 0022-328X
PUBLISHER: Elsevier Science S.A.
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 04 Jun 1998
AB Novel organometallic complexes based on γ-substituted β-diketone ligands with terminal metal Rh(I) were prepared by reaction of the ligands with [Rh(CO)2(μ-Cl)]2. The mesomorphism of the ligands and complexes was studied using DSC and polarizing microscopy. Nonmesogenic ligands with n = 7, 8, 9, 10, 11 can form liquid crystalline phase by direct coordination to metal. The effect of the terminal C number on the mesomorphism also is discussed.
IT **207297-52-7P 207297-58-3P 207297-61-8P**
207297-63-0P 208767-58-2P 208767-60-6P
208767-61-7P
(preparation and liquid crystal properties of)
RN 207297-52-7 HCAPLUS
CN Rhodium, [4-[[1-(acetyl-κO)-2-(oxo-κO)propoxy]carbonyl]phenyl 4-(octyloxy)benzoato]dicarbonyl-, (SP-4-2)- (9CI) (CA INDEX NAME)



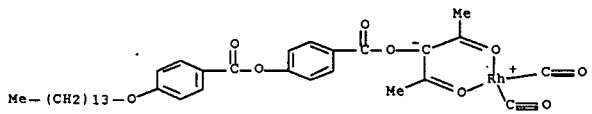
RN 207297-58-3 HCAPLUS
CN Rhodium, [4-[[1-(acetyl-κO)-2-(oxo-κO)propoxy]carbonyl]phenyl 4-(decyloxy)benzoato]dicarbonyl-, (SP-4-2)- (9CI) (CA INDEX NAME)



RN 207297-61-8 HCAPLUS
CN Rhodium, [4-[[1-(acetyl-κO)-2-(oxo-κO)propoxy]carbonyl]phenyl 4-(dodecyloxy)benzoato]dicarbonyl-, (SP-4-2)- (9CI) (CA INDEX NAME)

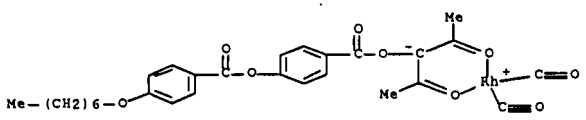


RN 207297-63-0 HCAPLUS
CN Rhodium, [4-[[1-(acetyl-κO)-2-(oxo-κO)propoxy]carbonyl]phenyl 4-(tetradecyloxy)benzoato]dicarbonyl-, (SP-4-2)- (9CI) (CA INDEX NAME)



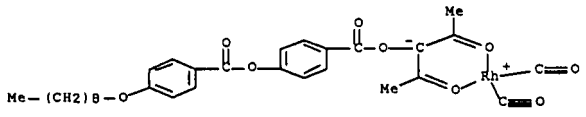
RN 208767-58-2 HCAPLUS

CN Rhodium, [4-[[1-(acetyl-κO)-2-(oxo-κO)propoxy]carbonyl]phenyl 4-(heptyloxy)benzoato]dicarbonyl-, (SP-4-2)- (9CI) (CA INDEX NAME)



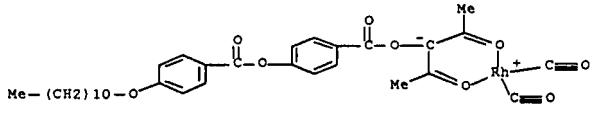
RN 208767-60-6 HCAPLUS

CN Rhodium, [4-[[1-(acetyl-κO)-2-(oxo-κO)propoxy]carbonyl]phenyl 4-(nonyloxy)benzoato]dicarbonyl-, (SP-4-2)- (9CI) (CA INDEX NAME)



RN 208767-61-7 HCAPLUS

CN Rhodium, [4-[[1-(acetyl-κO)-2-(oxo-κO)propoxy]carbonyl]phenyl 4-(undecyloxy)benzoato]dicarbonyl-, (SP-4-2)- (9CI) (CA INDEX NAME)



CC 75-11 (Crystallography and Liquid Crystals)
Section cross-reference(s): 78

IT **207297-52-7P 207297-58-3P 207297-61-8P**
207297-63-0P 208767-58-2P 208767-60-6P
208767-61-7P
(preparation and liquid crystal properties of)

REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 14 OF 28 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1998:331599 HCAPLUS Full-text

DOCUMENT NUMBER: 129:11967

TITLE: Influence of the Bridging Group of Cross-Conjugated Nitrogenous Bases on the Spectra and Structure of Solvatochromic Mixed-Ligand Copper(II) Chelates Containing β-Ketoenols

AUTHOR(S): Tsiamis, Chris; Hatzidimitriou, Antonis G.; Tzavellas, Leandros C.

CORPORATE SOURCE: Department of Chemistry, University of Thessaloniki, Thessaloniki, 54006, Greece

SOURCE: Inorganic Chemistry (1998), 37(12), 2903-2909
CODEN: INOCAJ; ISSN: 0020-1669

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

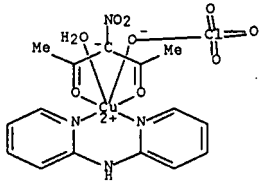
ED Entered STN: 04 Jun 1998

AB The concomitant reaction of Cu(II) with a heterocyclic nitrogenous cross-conjugated Lewis base (2,2'-dipyridyl ketone, dpk, or 2,2'-dipyridylamine, dpamH) and the anion of a 2-substituted 1,3-dione, β-, e.g. X-acac- (X = H, Me, Cl, CN, NO2) affords mixed-ligand chelates. The composition and structure of the chelates depend on the group linking the pyridyl rings. Chelation renders the 2,2'-dipyridyl ketone susceptible to nucleophilic attack by protic mols. It also depends on the group attached to the β-dionato moiety since electron attracting substituents facilitate ligation of a H2O mol. when the 2,2'-dipyridylamine is present. Spectroscopic observations indicated square pyramidal or distorted tetragonal stereochemistries of the ensuing mixed-ligand chelates with the carbonyl oxygens and the pyridyl nitrogens forming the basal plane. Confirmation was acquired by x-ray structure determination of representative chelates. [Cu(NC-acac)dpamH(H2O) OClO3] crystallizes in the space group Pnma with Z = 8 (i.e. four mols. per cell), a 17.996(1), b 13.972(1), c 7.801(1) Å. The Cu atom is 2.401(3) Å from the O of the H2O mol. and 2.60(2) Å from an O atom of the ClO4- group. The chelate [Cu(NC-acac)dpC(OH)OCH3(OClO3)], resulting from the addition of MeOH to the C atom bridging the pyridyl rings, crystallizes in the space group P21/n with a 10.661(1), b 14.987(2), c 13.963(1) Å, β 110.57(3)°, Z = 4. An O of the ClO4-group is in apical position, and it is 2.634(8) Å from the Cu atom. The etheric O is distanced 2.615(2) Å from the Cu atom, and the O-Cu-O angle of these weak bonds is only 154.4(2)°. In these chelates the nitrogenous bases adopt the boat conformation with the pyridyl rings forming dihedral angles of .apprx.33°.

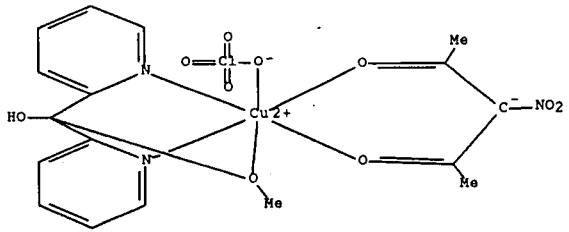
IT **207454-65-7P 207454-72-6P**
(preparation and UV-vis. spectrum of)

RN 207454-65-7 HCAPLUS

CN Copper, aqua(3-nitro-2,4-pentanedionato-κO,κO')(perchlorato-κO)[N-(2-pyridinyl-κN)-2-pyridinamine-κN1]-, (OC-6-34)- (9CI) (CA INDEX NAME)



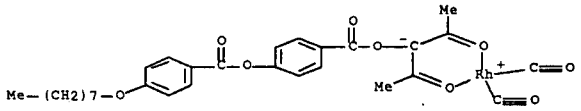
RN 207454-72-6 HCAPLUS
CN Copper, [α-(methoxy-κO)-α-(2-pyridinyl-κN)-2-pyridinemethanol-κN1](3-nitro-2,4-pentanedionato-κO,κO')(perchlorato-κO)-, (OC-6-34)- (9CI) (CA INDEX NAME)



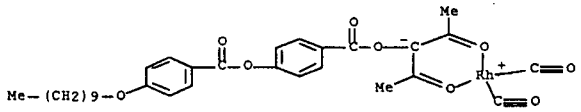
CC 78-7 (Inorganic Chemicals and Reactions)
Section cross-reference(s): 75
IT 207454-61-3P 207454-62-4P 207454-63-5P **207454-65-7P**
207454-66-8P 207454-67-9P 207454-68-0P 207454-69-1P
207454-70-4P **207454-72-6P**
(preparation and UV-vis. spectrum of)
REFERENCE COUNT: 46 THERE ARE 46 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 15 OF 28 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1998:228221 HCAPLUS Full-text
DOCUMENT NUMBER: 128:329098
TITLE: Synthesis and mesomorphism of γ-substituted β-diketonate dicarbonylrhodium(I) complexes
AUTHOR(S): Wan, Wen; Zhao, Ke-Qing; Guan, Wen-Jie; Yang, Li-Mei; Zhang, Liang-Fu
CORPORATE SOURCE: Chengdu Inst. Organic Chem., Chinese Acad. Scis., Chengdu, 610041, Peop. Rep. China
SOURCE: Huaxue Xuebao (1998), 56(3), 278-283
CODEN: HHHPA4; ISSN: 0567-7351
PUBLISHER: Kexue Chubanshe
DOCUMENT TYPE: Journal
LANGUAGE: Chinese
ED Entered STN: 23 Apr 1998
AB Rodlike organometallic liquid crystals of γ-substituted β-diketonate dicarbonyl Rh(I) complexes containing one or two benzene rings were synthesized and characterized. The effects of rigid cores, structure and the ratio of mol. length to width on the liquid crystalline properties were also studied. The model design of nematic organic liquid crystal can also direct the mol. design and synthesis of organometallic liquid crystals.
IT **207297-52-7P 207297-58-3P 207297-61-8P**

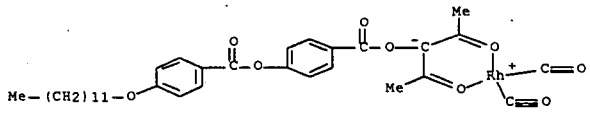
207297-63-0P
(preparation and liquid crystal properties of)
RN 207297-52-7 HCAPLUS
CN Rhodium, [4-[[1-(acetyl-κO)-2-(oxo-κO)propoxy]carbonyl]phenyl 4-(octyloxy)benzoato]dicarbonyl-, (SP-4-2)- (9CI) (CA INDEX NAME)



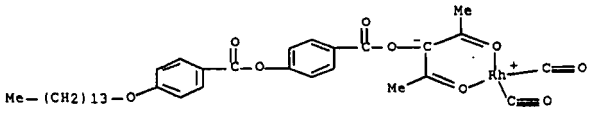
RN 207297-58-3 HCAPLUS
CN Rhodium, [4-[[1-(acetyl-κO)-2-(oxo-κO)propoxy]carbonyl]phenyl 4-(decyloxy)benzoato]dicarbonyl-, (SP-4-2)- (9CI) (CA INDEX NAME)



RN 207297-61-8 HCAPLUS
CN Rhodium, [4-[[1-(acetyl-κO)-2-(oxo-κO)propoxy]carbonyl]phenyl 4-(dodecyloxy)benzoato]dicarbonyl-, (SP-4-2)- (9CI) (CA INDEX NAME)



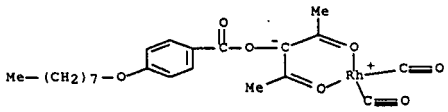
RN 207297-63-0 HCAPLUS
CN Rhodium, [4-[[1-(acetyl-κO)-2-(oxo-κO)propoxy]carbonyl]phenyl 4-(tetradecyloxy)benzoato]dicarbonyl-, (SP-4-2)- (9CI) (CA INDEX NAME)



IT **207297-40-3P 207297-43-6P 207297-46-9P 207297-49-2P**
(preparation and phase transition temps. of)

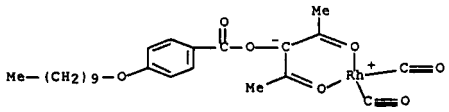
RN 207297-40-3 HCAPLUS

CN Rhodium, dicarbonyl[1-(acetyl-κO)-2-(oxo-κO)propyl 4-(octyloxy)benzoato]-, (SP-4-2)- (9CI) (CA INDEX NAME)



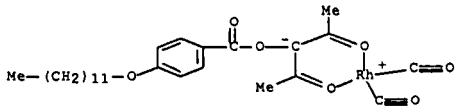
RN 207297-43-6 HCAPLUS

CN Rhodium, dicarbonyl[1-(acetyl-κO)-2-(oxo-κO)propyl 4-(decyloxy)benzoato]-, (SP-4-2)- (9CI) (CA INDEX NAME)



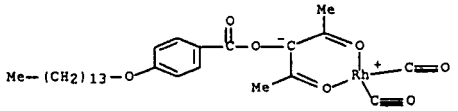
RN 207297-46-9 HCAPLUS

CN Rhodium, dicarbonyl[1-(acetyl-κO)-2-(oxo-κO)propyl 4-(dodecyloxy)benzoato]-, (SP-4-2)- (9CI) (CA INDEX NAME)



RN 207297-49-2 HCAPLUS

CN Rhodium, dicarbonyl[1-(acetyl-κO)-2-(oxo-κO)propyl 4-(tetradecyloxy)benzoato]-, (SP-4-2)- (9CI) (CA INDEX NAME)



CC 75-11 (Crystallography and Liquid Crystals)
Section cross-reference(s): 78

IT 207297-38-9P 207297-39-0P **207297-52-7P 207297-58-3P 207297-61-8P 207297-63-0P**
(preparation and liquid crystal properties of)

IT 163929-94-0P 163930-26-5P 206546-59-0P 206546-60-3P 207297-36-7P 207297-37-8P **207297-40-3P 207297-43-6P 207297-46-9P 207297-49-2P**
(preparation and phase transition temps. of)

L23 ANSWER 16 OF 28 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1998:72251 HCAPLUS Full-text

DOCUMENT NUMBER: 128:147802

TITLE: Synthesis and characterization of rod-like liquid crystal of β-diketonate rhodium complex

AUTHOR(S): Wan, Wen; Zhao, Keqing; Guan, Wenjie; Wang, Chunyan; Zhang, Liangfu

CORPORATE SOURCE: Chengdu Inst. Organic Chem., Chinese Academy Sci., Chengdu, 610041, Peop. Rep. China

SOURCE: Yingyong Huaxue (1997), 14(6), 81-83
CODEN: YIHUED; ISSN: 1000-0518

PUBLISHER: Yingyong Huaxue Bianji Weiyuanhui

DOCUMENT TYPE: Journal

LANGUAGE: Chinese

ED Entered STN: 07 Feb 1998

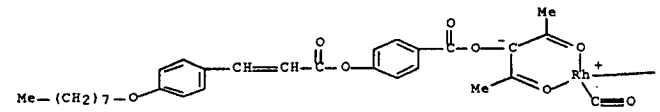
AB The rodlike liquid crystalline compound of β-diketone and its complex with terminal carbonyl Rh were synthesized and characterized by elemental anal., IR, UV, and 1H NMR. Its property was studied by DSC and polarizing microscope. The complex is a nematic thermotropical liquid crystal.

IT **202209-35-6P**
(preparation and liquid crystal properties of)

RN 202209-35-6 HCAPLUS

CN Rhodium, [1-(acetyl-κO)-2-(oxo-κO)propyl 4-[[(2E)-3-[4-(octyloxy)phenyl]-1-oxo-2-propenyl]oxy]benzoato]dicarbonyl-, (SP-4-2)- (9CI) (CA INDEX NAME)

PAGE 1-A

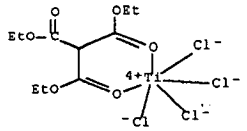


PAGE 1-B

CC 75-11 (Crystallography and Liquid Crystals)
Section cross-reference(s): 78
IT **202209-35-6P**
(preparation and liquid crystal properties of)

L23 ANSWER 17 OF 28 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1997:50516 HCAPLUS Full-text
DOCUMENT NUMBER: 126:151966
TITLE: The crystal structure and properties of [TiCl4{CH(CO2Et)3}] and [Al2Cl6{μ-C2H4(CO2Et)2}]
AUTHOR(S): Sobota, Piotr; Szafert, Slawomir; Glowiak, Tadeusz
CORPORATE SOURCE: Faculty of Chemistry, University of Wroclaw, 14 F. Joliot-Curie, 50-383, Wroclaw, Pol.
SOURCE: Journal of Organometallic Chemistry (1996), 526(2), 329-333
CODEN: JORCAI; ISSN: 0022-328X
PUBLISHER: Elsevier
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 23 Jan 1997
AB The reactions of TiCl4 with CH(CO2Et)3 and AlCl3 with C2H4(CO2Et)2 in CH2Cl2 gave [TiCl4{CH(CO2Et)3}] (1) and [Al2Cl6{μ-C2H4(CO2Et)2}] (2) resp. The crystal structures of 1 and 2 were determined by a single crystal x-ray diffraction studies and refined by full-matrix least squares techniques to R1 = 0.0272 and 0.0282 (for 2654 and 1274 unique nonzero reflections) for 1 and 2 resp. The crystals of 1 belong to the space group C2/c with Z = 8 and a 17.131(8), b 10.715(3), c 18.512(5) Å and β 92.97(3)°. The titanium atom in 1 is octahedrally coordinated by four terminal chlorine atoms and two oxygen atoms in cis position from the coordinated triester mol. Crystals of 2 are monoclinic, space group P21/c, Z = 4, a 14.109(2), b 10.049(2), c 15.644(3) Å and β 116.65(2)°. In the mol. dimeric compound, each aluminum atom is tetrahedrally coordinated by three terminal chlorine atoms and one oxygen atom from the bridging di-Et succinate mol.
IT **186505-59-9P**
(preparation and crystal structure)
RN 186505-59-9 HCAPLUS

CN Titanium, tetrachloro(triethyl methanetricarboxylate-κO''',κO'''')-, (OC-6-22)- (9CI) (CA INDEX NAME)



CC 78-7 (Inorganic Chemicals and Reactions)
Section cross-reference(s): 75
IT **186505-59-9P** 186505-60-2P
(preparation and crystal structure)
REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 18 OF 28 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1995:875502 HCAPLUS Full-text
DOCUMENT NUMBER: 123:328439
TITLE: Hybridization effects on the spectra and structure of solvatochromic copper(II) chelates containing β-diones and nitrogenous bases
AUTHOR(S): Tsiamis, Chris; Youri-Tsochatzi, Catherine; Hatzidimitriou, Antony; Gourdon, Andre
CORPORATE SOURCE: Department of Chemistry, University of Thessaloniki, Thessaloniki, 54006, Greece
SOURCE: Inorganica Chimica Acta (1995), 237(1-2), 93-102
CODEN: ICHAA3; ISSN: 0020-1693
PUBLISHER: Elsevier
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 25 Oct 1995
AB Cu(II) chelates containing a bidentate nitrogenous base (1,2-diamine or heteroarom. α-diimine, enR), the anion of a β-dione, β -, and the ClO4- group, [Cu(enR)β]ClO4, was prepared and characterized and the influence of hybridization of the N donor atoms on the spectra and structure of these compds. was assessed. The spectra (IR, ESR, electronic excitation) indicate that in the absence of steric interference, the CuN2O2 chromophore attains square planar geometry. The ESR observables suggest appreciable covalency. Changes in the structure occur because of the susceptibility of the coordinatively unsatd. [Cu(enR)β]+ entity to covalent interactions, which are enhanced as the hybridization of the N donor atoms changes from sp3 to sp2. The solvatochromism of the compds. implicates tetragonal distortions in strongly polar solvents and deformed square pyramidal structures in the presence of weakly coordinating anions or mols. Details of the structure of the [Cu(enR)β]+ entity and the conformation and configuration of the 1,2-diamines were gathered from the x-ray study of (1-(2-aminoethyl)pyrrolidine)(pentane-2,4-dionato)copper(II) perchlorate, [Cu(aep)acac]ClO4. The orthorhombic compound crystallizes in the Pna21 space group. The crystal data and the R value are: a 24.5370(7), b 8.4785(4), c

7.6720(3) Å, Vc = 1596(1) Å3, Z = 4, R = 0.0428 for 1099 observed unique reflections.

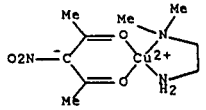
IT **152748-68-0P 170659-63-9P 170659-65-1P 170659-67-3P 170659-69-5P 170659-71-9P 170659-73-1P**
(preparation and hybridization effects in solvatochromic copper dione nitrogenous base complexes)

RN 152748-68-0 HCAPLUS

CN Copper(1+), (N,N-dimethyl-1,2-ethanediamine-N,N')(3-nitro-2,4-pentanedionato-O2,O4)-, (SP-4-3)-, perchlorate (9CI) (CA INDEX NAME)

CM 1

CRN 152748-67-9
CMF C9 H18 Cu N3 O4
CCI CCS



CM 2

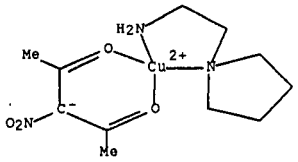
CRN 14797-73-0
CMF Cl O4

RN 170659-63-9 HCAPLUS

CN Copper(1+), (3-nitro-2,4-pentanedionato-O2,O4)(1-pyrrolidineethanamine-Nα,N1)-, (SP-4-3)-, perchlorate (9CI) (CA INDEX NAME)

CM 1

CRN 170659-62-8
CMF C11 H20 Cu N3 O4
CCI CCS



CM 2

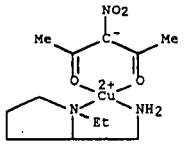
CRN 14797-73-0
CMF Cl O4

RN 170659-65-1 HCAPLUS

CN Copper(1+), (1-ethyl-2-pyrrolidinemethanamine-Nα,N1)(3-nitro-2,4-pentanedionato-O2,O4)-, (SP-4-3)-, perchlorate (9CI) (CA INDEX NAME)

CM 1

CRN 170659-64-0
CMF C12 H22 Cu N3 O4
CCI CCS



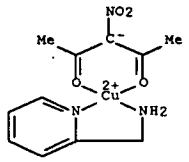
CM 2

CRN 14797-73-0
CMF Cl O4

RN 170659-67-3 HCAPLUS
CN Copper(1+), (3-nitro-2,4-pentanedionato-O2,O4)(2-pyridinemethanamine-N1,N2)-, (SP-4-3)-, perchlorate (9CI) (CA INDEX NAME)

CM 1

CRN 170659-66-2
CMF C11 H14 Cu N3 O4
CCI CCS



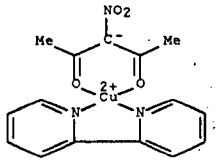
CM 2

CRN 14797-73-0
CMF Cl O4

RN 170659-69-5 HCAPLUS
CN Copper(1+), (2,2'-bipyridine-N,N')(3-nitro-2,4-pentanedionato-O2,O4)-, (SP-4-3)-, perchlorate (9CI) (CA INDEX NAME)

CM 1

CRN 170659-68-4
CMF C15 H14 Cu N3 O4
CCI CCS



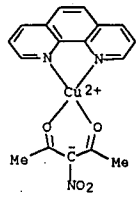
CM 2

CRN 14797-73-0
CMF Cl O4

RN 170659-71-9 HCAPLUS
CN Copper(1+), (3-nitro-2,4-pentanedionato-O2,O4)(1,10-phenanthroline-N1,N10)-, (SP-4-2)-, perchlorate (9CI) (CA INDEX NAME)

CM 1

CRN 170659-70-8
CMF C17 H14 Cu N3 O4
CCI CCS



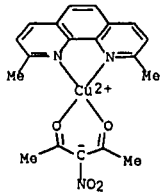
CM 2

CRN 14797-73-0
CMF Cl O4

RN 170659-73-1 HCAPLUS
CN Copper(1+), (2,9-dimethyl-1,10-phenanthroline-N1,N10)(3-nitro-2,4-pentanedionato-O2,O4)-, perchlorate (9CI) (CA INDEX NAME)

CM 1

CRN 170659-72-0
CMF C19 H18 Cu N3 O4
CCI CCS



CM 2

CRN 14797-73-0
CMF Cl O4

CC 78-7 (Inorganic Chemicals and Reactions)
Section cross-reference(s): 73, 75
IT **152748-68-0P 170659-63-9P 170659-65-1P 170659-67-3P 170659-69-5P 170659-71-9P 170659-73-1P**
(preparation and hybridization effects in solvatochromic copper dione nitrogenous base complexes)

L23 ANSWER 19 OF 28 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1994:123308 HCAPLUS Full-text
DOCUMENT NUMBER: 120:123308
TITLE: Counterion effects in the spectra and structure of solvatochromic copper(II) chelates containing 1,2-diamines and β-ketoenols
AUTHOR(S): Tsiamis, Chris; Tzavellas, Leandros C.
CORPORATE SOURCE: Department of Chemistry, University of Thessaloniki, Thessaloniki, 54006, Greece
SOURCE: Inorganica Chimica Acta (1993), 207(2), 179-90
CODEN: ICHAA3; ISSN: 0020-1693
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 05 Mar 1994

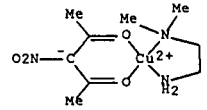
AB The concurrent reaction of Cu(II) salts with certain β-diones and N-substituted 1,2-diaminoethanes (enR) is reported. The influence of γ-position derivs. of 2,4-pentanedione (X-acacH; X = H, CN, NO2) is described, and the contribution of anions to the stability, the stereochem. and the electronic structure of the resulting mixed-ligand chelates is discussed. Spectroscopic observations disclose that the bidentate ligands form chelate rings with Cu(II) as common vertex. [Cu(β-dionato)enR]+ are virtually square-planar with CuN2O2 chromophore. Cu(II) coordination is unsatd. and in addition to electrostatic interactions that prevail when bulky polyat. anions counterbalance the pos. charge, it is capable of forming covalent bonds with neutral mols. and charged species such as the halides and pseudohalides. The basal CuN2O2 plane is distorted upon coordination of unidentate ligands residing on the apex of the resulting square-pyramidal structure. Further increase in the coordination number of Cu(II) by bidentate anions or neutral mols. leads to tetragonally distorted octahedral structures. This change in the symmetry of the field induced on Cu(II) is revealed by spectral shifts that also disclose covalent interactions in the encounters of the CuN2O2 chromophore with polar or polarizable mols. These interactions are enhanced with increasing ability of the attacking species to act as an electron pair donor. Linear dependence of the ligand field excitation maximum on the donicity of the attacking species was established.

IT **152748-68-0P 152767-34-5P**
(preparation and solvent effect in electronic spectra of)

RN 152748-68-0 HCAPLUS
CN Copper(1+), (N,N-dimethyl-1,2-ethanediamine-N,N')(3-nitro-2,4-pentanedionato-O2,O4)-, (SP-4-3)-, perchlorate (9CI) (CA INDEX NAME)

CM 1

CRN 152748-67-9
CMF C9 H18 Cu N3 O4
CCI CCS



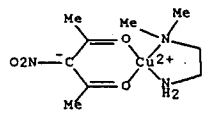
CM 2

CRN 14797-73-0
CMF Cl O4

RN 152767-34-5 HCAPLUS
CN Copper(1+), (N,N-dimethyl-1,2-ethanediamine-κN,κN')(3-nitro-2,4-pentanedionato-κO,κO')-, (SP-4-3)-, nitrate (9CI) (CA INDEX NAME)

CM 1

CRN 152748-67-9
CMF C9 H18 Cu N3 O4
CCI CCS



CM 2

CRN 14797-55-8
CMF N O3

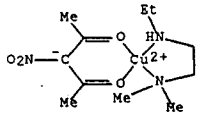
CC 78-7 (Inorganic Chemicals and Reactions)
Section cross-reference(s): 73
IT 62191-97-3P 62191-99-5P 150154-09-9P 150154-11-3P 150154-12-4P
150154-13-5P 150154-14-6P 150154-15-7P 150174-19-9P
150205-47-3P 152748-63-5P 152748-64-6P 152748-65-7P
152748-66-8P **152748-68-0P 152767-34-5P**
152767-35-6P 152767-36-7P
(preparation and solvent effect in electronic spectra of)

L23 ANSWER 20 OF 28 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1993:436490 HCAPLUS Full-text
DOCUMENT NUMBER: 119:36490
TITLE: Substituent and solvent effects in the spectra and structure of some mixed-ligand copper(II) chelates containing β-ketoenols
AUTHOR(S): Tsiamis, Chris; Themeli, Maria
CORPORATE SOURCE: Department of Chemistry, University of Thessaloniki, Thessaloniki, 54006, Greece
SOURCE: Inorganica Chimica Acta (1993), 206(1), 105-15
CODEN: ICHAA3; ISSN: 0020-1693
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 24 Jul 1993
AB The IR and the ligand-field excitation spectra of a series of new mixed-ligand copper(II) chelates that encompass N, N-dimethyl-N '-ethyl-ethylenediamine (dmeen) and the anion of a substituted β-ketoenol (1,3-dione) were obtained in the solid state and in solution Information related to the electronic excitation spectra, the IR spectra, the molar conductivity and the magnetic properties of the newly obtained and characterized chelates are presented and discussed. The molar conductivity in nitromethane reveals a predominance of electrostatic interactions between the [Cu(β-dione)dmeen]+ entity and bulky polyat. anions that counterbalance the pos. charge while the IR spectra disclose that the bidentate ligands form chelate rings with copper as the common vertex. The resulting CuN2O2 chromophore attains a square-coplanar structure and exhibits a tendency for axial ligation which is enhanced when electron-attracting substituents are attached to the β-dionato moiety. The tendency for axial ligation is partially fulfilled when suitable nucleophiles are present. Covalent interactions prevail when chloride is present and upon coordination it presumably occupies the apex of a square-pyramidal structure. Chain-like bidentate anions enable copper(II) to achieve coordination saturation and when configuration requirements demand it, they distort the square-planar arrangement of the initial CuN2O2 chromophore forming distorted octahedral structures. Covalent solute-solvent interactions are revealed by shifts in the ligand-field excitation spectra that are enhanced as the nucleophilicity of the solvent increases. Linear dependence of the ligand-field excitation maximum on solvent parameters related to donor properties is generally observed
IT **148379-26-4P 148379-27-5P 148379-28-6P**
(preparation and IR spectra and ligand field excitation spectra of)
RN 148379-26-4 HCAPLUS
CN Copper(1+), (N'-ethyl-N;N-dimethyl-1,2-ethanediamine-N,N')(3-nitro-2,4-pentanedionato-O2,O4)-, (SP-4-3)-, perchlorate (9CI) (CA INDEX NAME)

CM 1

CRN 148379-25-3
CMF C11 H22 Cu N3 O4
CCI CCS



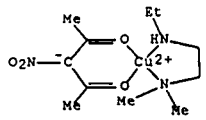
CM 2

CRN 14797-73-0
CMF Cl O4

RN 148379-27-5 HCAPLUS
CN Copper(1+), (N'-ethyl-N,N-dimethyl-1,2-ethanediamine-N,N')(3-nitro-2,4-pentanedionato-O2,O4)-, (SP-4-3)-, nitrate (9CI) (CA INDEX NAME)

CM 1

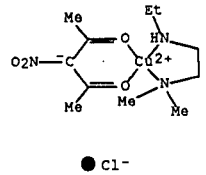
CRN 148379-25-3
CMF C11 H22 Cu N3 O4
CCI CCS



CM 2

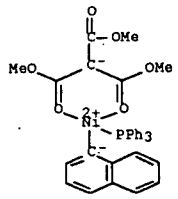
CRN 14797-55-8
CMF N O3

RN 148379-28-6 HCAPLUS
CN Copper(1+), (N'-ethyl-N,N-dimethyl-1,2-ethanediamine-N,N')(3-nitro-2,4-pentanedionato-O2,O4)-, chloride, (SP-4-3)- (9CI) (CA INDEX NAME)



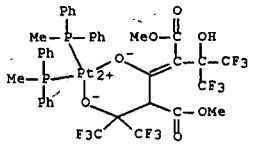
CC 73-3 (Optical, Electron, and Mass Spectroscopy and Other Related Properties)
Section cross-reference(s): 78
IT 145518-79-2P 145519-12-6P 145519-14-8P 145519-20-6P
145519-22-6P 145519-28-4P 148353-92-8P 148353-94-0P
148353-95-1P 148353-97-3P 148379-24-2P **148379-26-4P**
148379-27-5P 148379-28-6P 148379-30-0P
148379-32-2P 148379-34-4P 148379-36-6P 148379-38-8P
148379-39-9P 148379-40-2P 148379-44-6P 148415-03-6P
(preparation and IR spectra and ligand field excitation spectra of)

L23 ANSWER 21 OF 28 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1986:609179 HCAPLUS Full-text
DOCUMENT NUMBER: 105:209179
TITLE: Synthesis and structure of new arylnickel(II) malonato complexes
AUTHOR(S): Agnes, Giovanni; Bart, Jan C. J.; Calcaterra, Mario; Cavigiolo, Walter; Santini, Claudio
CORPORATE SOURCE: Ist. G. Donegani S.p.A., Novara, 28100, Italy
SOURCE: Transition Metal Chemistry (Dordrecht, Netherlands) (1986), 11(7), 246-52
CODEN: TMCHDN; ISSN: 0340-4285
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 105:209179
ED Entered STN: 13 Dec 1986
AB Reaction of malonate anions with chloro(aryl)bis(organophosphine)nicke l(II) complexes gives stable (aryl)(malonato)(organophosphine)nickel(I I) species. The x-ray crystal and mol. structure of (diethylmalonato-O,O)(α-naphthyl)(triphenylphosphine)nickel(II) shows distorted square-planar O2PC coordination about the Ni. The parameters and bonding of the triphenylphosphine-nickel and naphthyl moieties in the complex are normal, whereas considerable electron-delocalization occurs in the planar ethylmalonate moiety. The σ-naphthyl ligand is oriented almost perpendicularly in the IO2CP core-malonate plane.
IT **105203-94-9P**
(preparation and spectra of)
RN 105203-94-9 HCAPLUS
CN Nickel, 1-naphthalenyl(trimethyl methanetricarboxylato)(triphenylphosphine)-, (SP-4-3)- (9CI) (CA INDEX NAME)



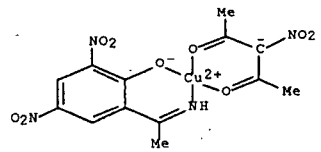
CC 29-13 (Organometallic and Organometalloidal Compounds)
Section cross-reference(s): 75
IT 105203-91-6P 105203-92-7P 105203-93-8P **105203-94-9P**
105203-95-0P 105203-96-1P
(preparation and spectra of)

L23 ANSWER 22 OF 28 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1979:121770 HCAPLUS Full-text
DOCUMENT NUMBER: 90:121770
TITLE: Reactions of dimethyl 3-oxoglutarate with zerovalent compounds of palladium and platinum. Preparation of 1-metallacyclobutan-3-one complexes and the x-ray crystal structure of 2,4-bis(methoxycarbonyl)-1,1-bis(triphenylphosphine)platinacyclobutan-3-one
AUTHOR(S): Clarke, David A.; Kemmitt, Raymond D. W.; Mazid, Muhammed A.; Schilling, Michael D.; Russell, David R.
CORPORATE SOURCE: Dep. Chem., Univ. Leicester, Leicester, UK
SOURCE: Journal of the Chemical Society, Chemical Communications (1978), (17), 744-5
CODEN: JCCCAT; ISSN: 0022-4936
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 12 May 1984
AB (MeO2CCH2)2CO reacted with ML4 (M = Pt, L = PPh3, PMePh2, PMe2Ph; M = Pd, L = PPh3) in C6H6 in the presence of dioxygen (room temperature) to give the corresponding metallacyclobutanones I (M, L as before) (60-85%). The x-ray structure of I (M = Pt, L = PPh3) indicated the presence of a highly puckered platinacyclobutanone ring. I (M = Pt, L = PMePh2) underwent a ring expansion reaction with (F3C)2CO to give 51% platinadioxane II.
IT **69503-10-2P**
(preparation of)
RN 69503-10-2 HCAPLUS
CN Platinum, [dimethyl 3-hydroxy-2,4-bis[2,2,2-trifluoro-1-hydroxy-1-(trifluoromethyl)ethyl]-2-pentenedioato(2-)-O3,O4]bis(methyldiphenylphosphine)-, (SP-4-3)- (9CI) (CA INDEX NAME)

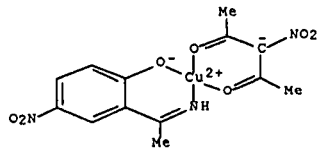


CC 29-13 (Organometallic and Organometalloidal Compounds)
Section cross-reference(s): 23, 75
IT 69503-08-8P 69503-09-9P **69503-10-2P** 69503-11-3P
(preparation of)

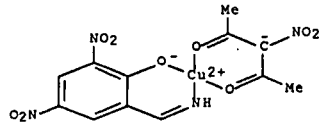
L23 ANSWER 23 OF 28 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1978:114525 HCAPLUS Full-text
DOCUMENT NUMBER: 88:114525
TITLE: Nitration of some mixed ligand copper(II) complexes of acetylacetone, benzoylacetone, dibenzoylmethane and Schiff bases
AUTHOR(S): Doraswamy, Uma; Bhattacharya, P. K.
CORPORATE SOURCE: Dep. Chem., Maharaja Sayajirao Univ. Baroda, Baroda, India
SOURCE: Indian Journal of Chemistry, Section A: Inorganic, Physical, Theoretical & Analytical (1977), 15A(9), 828-9
CODEN: IJCADU; ISSN: 0376-4710
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 12 May 1984
AB Nitration of the coordinated ligands in complexes of the type [CuLL'], where HL = salicylaldmine, 2-hydroxyacetophenonimine, or 2-hydroxy-3-methylacetophenonimide and HL' = acetylacetone, benzoylacetone, or dibenzoylmethane, was carried out. Trinitro compds. were obtained in all cases, except that of 2-hydroxy-3-methylacetophenonimine where a dinitro compound was obtained. The substitution products characterized by elemental anal., magnetic moments, conductance measurements, and IR spectral studies.
IT **65588-31-0P 65588-32-1P 65888-28-0P**
(preparation of)
RN 65588-31-0 HCAPLUS
CN Copper, [2-(1-iminoethyl)-4,6-dinitrophenolato-N2,O1](3-nitro-2,4-pentanedionato-O2,O4)- (9CI) (CA INDEX NAME)



RN 65588-32-1 HCAPLUS
CN Copper, [2-(1-iminoethyl)-4-nitrophenolato-N2,O1](3-nitro-2,4-pentanedionato-O2,O4)- (9CI) (CA INDEX NAME)



RN 65888-28-0 HCAPLUS
CN Copper, [2-(iminomethyl)-4,6-dinitrophenolato-N2,O1](3-nitro-2,4-pentanedionato-O2,O4)- (9CI) (CA INDEX NAME)



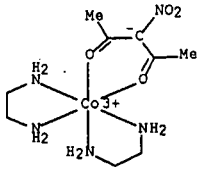
CC 78-7 (Inorganic Chemicals and Reactions)
IT 65588-29-6P 65588-30-9P **65588-31-0P 65588-32-1P**
65888-28-0P
(preparation of)

L23 ANSWER 24 OF 28 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1977:164622 HCAPLUS Full-text
DOCUMENT NUMBER: 86:164622
TITLE: The halogenation and nitration of the optical active isomer of the α-acetylacetonato(triethylenetetramine)cobalt(III) complex
AUTHOR(S): Kuroda, Kashiro; Yamaguchi, Kazumi; Yamaoka, Noriko
CORPORATE SOURCE: Fac. Sci., Ehime Univ., Matsuyama, Japan
SOURCE: Bulletin of the Chemical Society of Japan (1977), 50(2), 535-6
CODEN: BCSJA8; ISSN: 0009-2673
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 12 May 1984
AB The methylidyne H of the coordinated acetylacetonate ion in (+)D-α-acetylacetonato(triethylenetetramine)cobalt(III) perchlorate was replaced with halogens and with a nitro group with a complete retention of the configuration. The order of the molar rotations of the complexes is:

acetylacetonate < 3- chloroacetylacetonate < 3-bromoacetylacetonate < 3-iodoacetylacetonate and acetylacetonate .apprx.3-nitroacetylacetonate.
IT **62653-74-1P 62860-66-6P**
(preparation of)
RN 62653-74-1 HCAPLUS
CN Cobalt(2+), bis(1,2-ethanediamine-N,N')(3-nitro-2,4-pentanedionato-O2,O4)-, (OC-6-22-A)-, diperchlorate (9CI) (CA INDEX NAME)

CM 1

CRN 62653-73-0
CMF C9 H22 Co N5 O4
CCI CCS



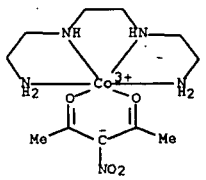
CM 2

CRN 14797-73-0
CMF Cl O4

RN 62860-66-6 HCAPLUS
CN Cobalt(2+), [N,N'-bis(2-aminoethyl)-1,2-ethanediamine-N,N',N'',N''']](3-nitro-2,4-pentanedionato-O2,O4)-, (OC-6-32-A)-, diperchlorate (9CI) (CA INDEX NAME)

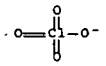
CM 1

CRN 62860-65-5
CMF C11 H24 Co N5 O4
CCI CCS



CM 2

CRN 14797-73-0
CMF Cl O4



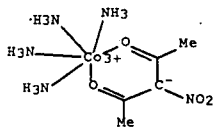
CC 78-7 (Inorganic Chemicals and Reactions)
IT 62653-70-7P 62653-72-9P **62653-74-1P** 62653-76-3P
62860-60-0P 62860-62-2P 62860-64-4P **62860-66-6P**
(preparation of)

L23 ANSWER 25 OF 28 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1976:586108 HCAPLUS Full-text
DOCUMENT NUMBER: 85:186108
TITLE: Halogenation and nitration of some mixed ligand acetylacetonatocobalt(III) complexes
AUTHOR(S): Kuroda, Kashiro; Yoshitani, Kouzou; Kunigita, Kazufumi; Kamiiba, Yukiko; Watanabe, Kiyokatsu
CORPORATE SOURCE: Fac. Sci., Ehime Univ., Matsuyama, Japan
SOURCE: Bulletin of the Chemical Society of Japan (1976), 49(9), 2445-50
CODEN: BCSJA8; ISSN: 0009-2673
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 12 May 1984
AB In [Co(acac)(NH3)4](ClO4)2 (Hacac = acetylacetone), [Co(acac)en2](ClO4)2, [Co(acac)L](ClO4)2 (L = α- and β-triethylenetetramine), and fac(N)- and mer(N)-[Co(acac)Q]ClO4 (HQ = bis(2-aminoethyl)aminoacetic acid), the methine hydrogen of the coordinated acetylacetonate ion was substituted with Cl, Br, and I and in 5 of them, except mer(N)-[Co(acac)Q]ClO4, it has been substituted with a nitro group. The halogenated and the nitrated complexes were isolated and identified by means of electronic absorption spectra and NMR spectra. The effects of the substitutions on the properties and the characteristics of the substitution reactions are described and discussed.
IT **56371-44-9P 56371-48-3P 56371-52-9P**
56371-54-1P 56390-71-7P

(preparation of)
RN 56371-44-9 HCAPLUS
CN Cobalt(2+), tetraammine(3-nitro-2,4-pentanedionato-O2,O4)-, (OC-6-22)-, diperchlorate (9CI) (CA INDEX NAME)

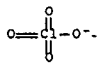
CM 1

CRN 56371-43-8
CMF C5 H18 Co N5 O4
CCI CCS



CM 2

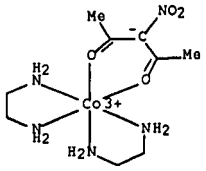
CRN 14797-73-0
CMF Cl O4



RN 56371-48-3 HCAPLUS
CN Cobalt(2+), bis(1,2-ethanediamine-N,N')(3-nitro-2,4-pentanedionato-O2,O4)-, (OC-6-22)-, diperchlorate (9CI) (CA INDEX NAME)

CM 1

CRN 56371-47-2
CMF C9 H22 Co N5 O4
CCI CCS



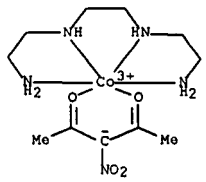
CM 2

CRN 14797-73-0
CMF Cl O4

RN 56371-52-9 HCAPLUS
CN Cobalt(2+), [N,N'-bis(2-aminoethyl)-1,2-ethanediamine-N,N',N'',N''']{3-nitro-2,4-pentanedionato-O2,O4}-, (OC-6-22)-, diperchlorate (9CI) (CA INDEX NAME)

CM 1

CRN 56371-51-8
CMF C11 H24 Co N5 O4
CCI CCS



CM 2

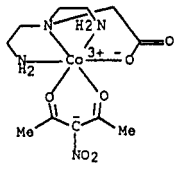
CRN 14797-73-0

CMF Cl O4

RN 56371-54-1 HCAPLUS
CN Cobalt(1+), [N,N-bis(2-aminoethyl)glycinato-N,N',N'',O]{3-nitro-2,4-pentanedionato-O2,O4}-, (OC-6-43)-, perchlorate (9CI) (CA INDEX NAME)

CM 1

CRN 56371-53-0
CMF C11 H20 Co N4 O6
CCI CCS



CM 2

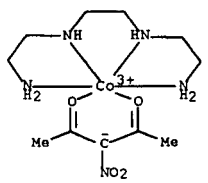
CRN 14797-73-0
CMF Cl O4

RN 56390-71-7 HCAPLUS
CN Cobalt(2+), [N,N'-bis(2-aminoethyl)-1,2-ethanediamine-N,N',N'',N''']{3-nitro-2,4-pentanedionato-O2,O4}-, (OC-6-32)-, diperchlorate (9CI) (CA INDEX NAME)

CM 1

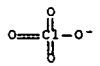
CRN 56390-70-6

CMF C11 H24 Co N5 O4
CCI CCS



CM 2

CRN 14797-73-0
CMF Cl O4



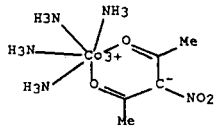
CC 78-7 (Inorganic Chemicals and Reactions)
IT 56371-42-7P **56371-44-9P** 56371-46-1P **56371-48-3P**
56371-50-7P **56371-52-9P** **56371-54-1P**
56390-71-7P 56553-40-3P 60912-05-2P 60912-07-4P
60922-57-8P 60922-59-0P 60922-61-4P 60922-63-6P 60922-65-8P
60944-72-1P 60966-29-2P 60966-31-6P 60966-33-8P 60966-35-0P
(preparation of)

L23 ANSWER 26 OF 28 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1975:452626 HCAPLUS Full-text
DOCUMENT NUMBER: 83:52626
TITLE: Bromination of some mixed ligand acetylacetonatocobalt(III) complexes
AUTHOR(S): Yoshitani, Kouzou; Kunigita, Kazufumi; Watanabe, Kiyokatsu; Kuroda, Kashiro
CORPORATE SOURCE: Fac. Sci., Ehime Univ., Matsuyama, Japan
SOURCE: Chemistry Letters (1975), (6), 573-6
CODEN: CMLTAG; ISSN: 0366-7022
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 12 May 1984
AB Four kinds of mixed ligand acetylacetonatocobalt(III) complexes ((NH3)4-, (en)2-, α-trien-, and β-trien-complexes) were substituted with Br, and 5 (the above 4 and fac(N)-DTMA-complex, DTMA-4-diethylenetriaminemonoacetate ion) were substituted with nitro group at the central methine of the ligand. The

brominated and the nitrated complexes were isolated and identified by electronic absorption and NMR spectra.
IT **56371-44-9P** **56371-48-3P** **56371-52-9P**
56371-54-1P **56390-71-7P**
(preparation of)
RN 56371-44-9 HCAPLUS
CN Cobalt(2+), tetraammine(3-nitro-2,4-pentanedionato-O2,O4)-, (OC-6-22)-, diperchlorate (9CI) (CA INDEX NAME)

CM 1

CRN 56371-43-8
CMF C5 H18 Co N5 O4
CCI CCS



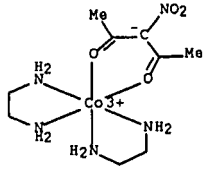
CM 2

CRN 14797-73-0
CMF Cl O4

RN 56371-48-3 HCAPLUS
CN Cobalt(2+), bis(1,2-ethanediamine-N,N')(3-nitro-2,4-pentanedionato-O2,O4)-, (OC-6-22)-, diperchlorate (9CI) (CA INDEX NAME)

CM 1

CRN 56371-47-2
CMF C9 H22 Co N5 O4
CCI CCS



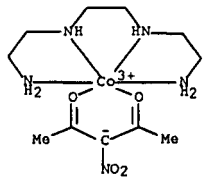
CM 2

CRN 14797-73-0
CMF Cl O4

RN 56371-52-9 HCAPLUS
CN Cobalt(2+), [N,N'-bis(2-aminoethyl)-1,2-ethanediamine-N,N',N'',N''']](3-nitro-2,4-pentanedionato-O2,O4)-, (OC-6-22)-, diperchlorate (9CI) (CA INDEX NAME)

CM 1

CRN 56371-51-8
CMF C11 H24 Co N5 O4
CCI CCS



CM 2

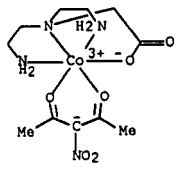
CRN 14797-73-0

CMF Cl O4

RN 56371-54-1 HCAPLUS
CN Cobalt(1+), [N,N-bis(2-aminoethyl)glycinato-N,N',N'',O](3-nitro-2,4-pentanedionato-O2,O4)-, (OC-6-43)-, perchlorate (9CI) (CA INDEX NAME)

CM 1

CRN 56371-53-0
CMF C11 H20 Co N4 O6
CCI CCS



CM 2

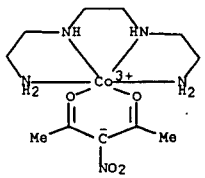
CRN 14797-73-0
CMF Cl O4

RN 56390-71-7 HCAPLUS
CN Cobalt(2+), [N,N'-bis(2-aminoethyl)-1,2-ethanediamine-N,N',N'',N''']](3-nitro-2,4-pentanedionato-O2,O4)-, (OC-6-32)-, diperchlorate (9CI) (CA INDEX NAME)

CM 1

CRN 56390-70-6

MF C11 H24 Co N5 O4
CCI CCS



CM 2

CRN 14797-73-0
MF Cl O4

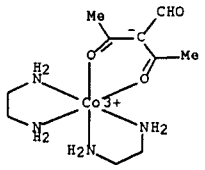
CC 78-7 (Inorganic Chemicals and Reactions)
IT 56371-42-7P **56371-44-9P** 56371-46-1P **56371-48-3P**
56371-50-7P **56371-52-9P** **56371-54-1P**
56390-71-7P 56553-40-3P
(preparation of)

L23 ANSWER 27 OF 28 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1975:452587 HCAPLUS Full-text
DOCUMENT NUMBER: 83:52587
TITLE: Substituent effects in electron transfer reactions. Preparation and chromium(II) reduction of 3-formylpentane-2,4-dionatobis(ethylenediamine)cobalt(III). Preparation of the linkage isomer 2-acetylbutane-1,3-dionatobis(ethylenediamine)cobalt(III)
AUTHOR(S): Balahura, Robert J.; Lewis, N. A.
CORPORATE SOURCE: Dep. Chem., Univ. Guelph, Guelph, ON, Can.
SOURCE: Canadian Journal of Chemistry (1975), 53(8), 1154-64
CODEN: CJCHAG; ISSN: 0008-4042
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 12 May 1984
AB The preparation of the linkage isomers, 3-formylpentane-2,4-dionatobis(ethylenediamine)cobalt(III) (I), and 2-acetylbutane-1,3-

dionatobis(ethylenediamine)cobalt(III) (II), are described. The kinetics of the reaction of Cr(OH2)62+ with I and the parent complex, 2,4-pentanedionatobis(ethylenediamine)cobalt(III) (III), were studied spectrophotometrically in acidic solution For I, the reduction is described by the rate law, -dln[Co(III)complex]/dt = k[Cr2+], and k = 0.0863M-1 sec-1 at 25°, μ = 1.0M (LiClO4). The activation parameters for this reaction were found to be ΔH‡ = 9.9 ± 0.5 kcal mole-1 and ΔS‡ = -30 ± 3 e.u. The reaction proceeded by an inner-sphere mechanism and the product of this reaction was isolated and characterized as 2-acetylbutane-1,3-dionatotetraaquochromium(III). The linkage isomer of this complex was also prepared The parent complex (III) was not reduced by Cr(OH2)62+ at an observable rate and an upper limit for the rate constant of this reaction was assigned a value of 10-4-10-6M-1 sec-1 at 25°. The ability of the formyl group to enhance the rate of electron transfer is discussed, and the Cr(II) reduction studies of related chelated systems are compared with the results obtained in this investigation.
IT **56081-63-1P**
(preparation and reduction by divalent chromium)
RN 56081-63-1 HCAPLUS
CN Cobalt(2+), (2-acetyl-3-oxobutanalato-O2,O3)bis(1,2-ethanediamine-N,N')-, (OC-6-22)-, bis[hexafluorophosphate(1-)] (9CI) (CA INDEX NAME)

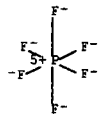
CM 1

CRN 56081-62-0
MF C10 H23 Co N4 O3
CCI CCS

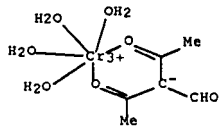


CM 2

CRN 16919-18-9
MF F6 P
CCI CCS



IT **56081-67-5P**
(preparation of)
RN 56081-67-5 HCAPLUS
CN Chromium(2+), (2-acetyl-3-oxobutanalato-O2,O3)tetraaqua-, (OC-6-22)-(9CI) (CA INDEX NAME)



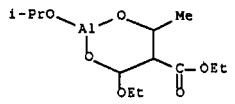
CC 78-7 (Inorganic Chemicals and Reactions)
Section cross-reference(s): 67
IT **56081-63-1P**
(preparation and reduction by divalent chromium)
IT 53230-80-1P 56081-65-3P 56081-66-4P **56081-67-5P**
(preparation of)

L23 ANSWER 28 OF 28 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1974:100114 HCAPLUS Full-text
DOCUMENT NUMBER: 80:100114
TITLE: Antiperspirant composition
INVENTOR(S): Bouillon, Claude; Dufaure, Pierre; Rosenbaum, Georges
PATENT ASSIGNEE(S): Oreal S. A.
SOURCE: Fr. Demande, 37 pp.
CODEN: FRXXBL
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

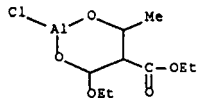
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2163432	A1	19730727	FR 1972-35784	19721010
FR 2163432	B1	19750912		
US 3819671	A	19740625	US 1972-294927	19721004
NL 7213649	A	19730619	NL 1972-13649	19721009
JP 48067444	A	19730914	JP 1972-100739	19721009
JP 52047021	B	19771129		
CH 555677	A	19741115	CH 1972-14729	19721009
IT 988359	B	19750410	IT 1972-70178	19721009
BR 7207036	D0	19730830	BR 1972-7036	19721010
DE 2249580	A1	19731213	DE 1972-2249580	19721010
AU 7247579	A	19740426	AU 1972-47579	19721010
CA 970782	A1	19750708	CA 1972-153611	19721010
AT 7208678	A	19760115	AT 1972-8678	19721010
AT 332559	B	19761011		
US 3929986	A	19751230	US 1974-454732	19740325

PRIORITY APPLN. INFO.: LU 1971-64463 A 19711216
US 1972-294927 A3 19721004

ED Entered STN: 12 May 1984
AB Heterocyclic Al compds. (I and II) [e.g. I (Z, R, and R' given): Cl, EtO2C, EtO2C; MeSO2O, EtO2C, EtO2C; p-MeC6H4SO2O, EtO2C, EtO2C; and II (Z, R2-R4 given): Cl, Ph, EtO4C, H (III), Cl, Me, Ac, H] are prepared and used at 0.5-20 weight % as antiperspirants. These materials are mostly alc.-soluble, and 1-5 weight % may be used in aerosols, and at higher levels in oils, creams, sticks, powders, and emulsions. I, e.g., are prepared by reacting a β-glycol with an Al alkoxide and reacting the resulting Al ether with HCl or a sulfonic acid. Thus III 3.5, hexachlorophene 0.1, perfume 0.2, starch ester 0.3, silicone oil 1.2, CF3Cl 47.35, and CCl2F2 47.35 parts by weight are pressurized together to give an impalpable dry spray powder.
IT **51689-11-3P 51689-12-4P**
(preparation of)
RN 51689-11-3 HCAPLUS
CN Aluminum, [ethyl 2-(ethoxyhydroxymethyl)-3-hydroxybutanoato(2-)](2-propanolato)- (9CI) (CA INDEX NAME)



RN 51689-12-4 HCAPLUS
CN Aluminum, chloro[ethyl 2-(ethoxyhydroxymethyl)-3-hydroxybutanoato(2-)]-(9CI) (CA INDEX NAME)



IC A61K; C07D
CC 62-4 (Essential Oils and Cosmetics)
Section cross-reference(s): 23, 25
IT 51688-88-1P 51688-89-2P 51688-91-6P 51688-95-0P 51688-96-1P
51688-97-2P 51688-99-4P 51689-00-0P 51689-01-1P 51689-03-3P
51689-04-4P 51689-07-7P 51689-09-9P **51689-11-3P**
51689-12-4P 51689-13-5P 51799-61-2P
(preparation of)

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=> d his 122

     (FILE 'EMBASE, BIOSIS, MEDLINE, DRUGU, HCAPLUS, JICST-EPLUS, JAPIO,
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L22            7 S L21 AND METALLIC?

=> d que 122
L20          170 SEA DOPPELT, P?/AU
L21           15 SEA L20 AND GAS(A) PHASE?
L22            7 SEA L21 AND METALLIC?


=> dup rem l1 122
FILE 'HCAPLUS' ENTERED AT 09:50:41 ON 24 JAN 2007
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
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FILE 'SCISEARCH' ENTERED AT 09:50:41 ON 24 JAN 2007
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PROCESSING COMPLETED FOR L1
PROCESSING COMPLETED FOR L22
L24            4 DUP REM L1 L22 (4 DUPLICATES REMOVED)
                 ANSWERS '1-4' FROM FILE HCAPLUS

=> d l24 1-4 ibib ab ind

L24  ANSWER 1 OF 4  HCAPLUS  COPYRIGHT 2007 ACS on STN DUPLICATE 1
ACCESSION NUMBER:         2004:271188  HCAPLUS  Full-text
DOCUMENT NUMBER:          140:295114
TITLE:                    New fluorine-free metal complexes for gas-phase
                          chemical deposition of metals
INVENTOR(S):              Doppelt, Pascal
PATENT ASSIGNEE(S):       Centre National de la Recherche Scientifique CNRS,
                          Fr.
SOURCE:                   Fr. Demande, 21 pp.
                          CODEN: FRXXBL
DOCUMENT TYPE:            Patent
LANGUAGE:                 French
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
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     FR 2845088           A1    20040402    FR 2002-12059          20020930
     FR 2845088           B1    20041203
     CA 2500386           A1    20040408    CA 2003-2500386        20030925
     WO 2004029061        A1    20040408    WO 2003-FR2820         20030925
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ,
             LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ,
             NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK,
             SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU,
             ZA, ZM, ZW
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         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
             BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
             EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE,
             SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,
             NE, SN, TD, TG
     AU 2003276374         A1    20040419    AU 2003-276374         20030925
     EP 1551851            A1    20050713    EP 2003-798226         20030925
     EP 1551851            B1    20060802
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC,
             PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
     JP 2006501280         T     20060112    JP 2004-539140         20030925
     AT 334990             T     20060815    AT 2003-798226         20030925
     US 2006121709         A1    20060608    US 2005-529569         20050929
                                                     <--
PRIORITY APPLN. INFO.:                        FR 2002-12059       A  20020930

                                              WO 2003-FR2820      W  20030925

OTHER SOURCE(S):          MARPAT 140:295114
AB   The invention has as an aim of new complexes of copper(I) or silver(I) and
     their use for chemical plating in gas phase of copper or silver metals
     practically free from impurities, complexes of structure I , in which M is Cu
     or Ag; R' and R", identical or different, represent a group chosen from among
     a C1-8 alkyl, a -OR''' group, in which R''' is C1-8 alkyl; R is a group chosen
     from among OR"", in which R"" is C1-8 alkyl, a nitro group NO2, an aldehyde
     function -CHO. an ester function -COOR"", in which R"" is C1-8 alkyl, and L is
     a ligand of stabilization.
IC   ICM  C07F001-08
     ICS  C07F001-10; C23C016-18
CC   75-1 (Crystallography and Liquid Crystals)
     Section cross-reference(s): 78
ST   fluorine free metal complex gas phase chem vapor deposition; copper
     CVD fluorine free complex; silver CVD fluorine free complex
IT   Vapor deposition process
       (chemical; fluorine-free metal complexes for gas-phase chemical
       deposition of metals)
IT   Coordination compounds
       (fluorine-free metal complexes for gas-phase chemical deposition of
       metals)
IT   25583-20-4, Titanium nitride
       (film, on silicon substrate for CVD; fluorine-free metal complexes
       for gas-phase chemical deposition of metals)
IT   7440-22-4P, Silver, processes   7440-50-8P, Copper, processes
       (fluorine-free metal complexes for gas-phase chemical deposition of
       metals)
IT   123-54-6, Acetylacetone, reactions   29965-97-7, Cyclooctadiene
       (fluorine-free metal complexes for gas-phase chemical deposition of
       metals)
IT   14630-40-1P   14689-25-9P   26213-42-3P   675200-66-5P   675200-67-6P
     675200-68-7P   675200-69-8P   675200-70-1P   675200-71-2P
     675200-72-3P
       (fluorine-free metal complexes for gas-phase chemical deposition of
       metals)
IT   7440-21-3, Silicon, processes
       (substrate for CVD; fluorine-free metal complexes for gas-phase
       chemical deposition of metals)
REFERENCE COUNT:          1     THERE ARE 1 CITED REFERENCES AVAILABLE FOR
                                THIS RECORD. ALL CITATIONS AVAILABLE IN THE
                                RE FORMAT
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L24 ANSWER 2 OF 4 HCAPLUS COPYRIGHT 2007 ACS on STN DUPLICATE 2
ACCESSION NUMBER: 1998:621221 HCAPLUS Full-text
DOCUMENT NUMBER: 129:245297
TITLE: Preparation of novel copper(I) β-diketonato alkyne complexes and use for chemical vapor deposition of **metallic** copper
INVENTOR(S): **Doppelt, Pascal**
PATENT ASSIGNEE(S): Centre National de la Recherche Scientifique (CNRS), Fr.
SOURCE: PCT Int. Appl., 20 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9840387	A1	19980917	WO 1998-FR518	19980313
W: AU, CA, JP, KR, SG, US				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
FR 2760743	A1	19980918	FR 1997-3029	19970313
FR 2760743	B1	19990723		
CA 2283160	A1	19980917	CA 1998-2283160	19980313
AU 9869233	A	19980929	AU 1998-69233	19980313
AU 743343	B2	20020124		
EP 966474	A1	19991229	EP 1998-914918	19980313
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2001514644	T	20010911	JP 1998-539311	19980313
TW 514671	B	20021221	TW 1998-87103811	19980316
US 6130345	A	20001010	US 1999-380948	19991215

PRIORITY APPLN. INFO.: FR 1997-3029 A 19970313
WO 1998-FR518 W 19980313

OTHER SOURCE(S): MARPAT 129:245297
AB The invention concerns [Cu(R'C(O)CRC(O)R'')L], prepared by known methods, useful for the **gas phase** chemical deposition of Cu. In the complexes, L is an alkyne in which the triple bond is partially deactivated by one or two electron-withdrawing groups, e.g. alkenynes; this deactivation suppresses the tendency for such complexes to dimerize. Also, R' and R'' are lower alkyls contingently substituted by ≥1 halogens; R = H, halogen, lower alkyl (as described earlier).
IC ICM C07F001-08
ICS C23C016-18
CC 29-9 (Organometallic and Organometalloidal Compounds)
Section cross-reference(s): 75
ST copper diketonato alkyne prepn CVD precursor; chem vapor deposition copper diketonato alkenyne; alkenyne copper diketonato prepn CVD precursor
IT Ketones, preparation
(1,3-diketones, copper alkyne complexes; preparation of copper(I) β-diketonato alkyne complexes and use for CVD of copper metal)
IT Alkenynes
Alkynes
(copper β-diketonato complexes; preparation of copper(I) β-diketonato alkyne complexes and use for CVD of copper metal)

IT Vapor deposition process
(metalorg.; preparation of copper(I) β-diketonato alkyne complexes and use for CVD of copper metal)
IT 13721-54-5, 1-Hexen-3-yne 23056-94-2
(for preparation of copper β-diketonato alkyne complex useful for CVD of copper metal)
IT 192817-15-5P 213133-85-8P
(preparation of copper(I) β-diketonato alkyne complexes and use for CVD of copper metal)
IT 7440-50-8P, Copper, preparation
(preparation of copper(I) β-diketonato alkyne complexes useful for CVD of copper metal)
REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 3 OF 4 HCAPLUS COPYRIGHT 2007 ACS on STN DUPLICATE 3
ACCESSION NUMBER: 1997:64808 HCAPLUS Full-text
DOCUMENT NUMBER: 126:231906
TITLE: Selective metalization of silica surfaces by copper CVD using a chemical affinity pattern created by **gas phase** silylation and UV exposure
AUTHOR(S): **Doppelt, Pascal**; Stelzle, Martin
CORPORATE SOURCE: Laboratoire de Chimie et d'Electrochimie des Materiaux Moleculaires, ESPCI, 10 rue Vauquelin, F-75231, Paris, Fr.
SOURCE: Microelectronic Engineering (1997), 33(1-4), 15-23
CODEN: MIENEF; ISSN: 0167-9317
PUBLISHER: Elsevier
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Selective metalization of surfaces was achieved using organo- **metallic** copper precursors in a completely dry two step process. Silica surfaces were derivatized with monofunctional silanes by **gas phase** silylation. Good coverage with covalently bound monolayers was obtained. UV-exposure of the halogen or sulfur terminated mols. employing a mask resulted in a controlled pattern of the surface affinity towards the copper complex. The water and oxygen content of the ambient atmospheric exerts a pronounced influence on the result of the CVD process, which was particularly observed in case of a thiol terminated surface. The applicability of this method for both pos. and neg. lithog. was demonstrated. The nature of the interaction between the chemical functionalized, patterned surface and the copper precursor is discussed.
CC 76-3 (Electric Phenomena)
ST metalization silica copper CVD silylation UV
IT Electric conductors
Silylation
UV radiation
Vapor deposition process
(selective metalization of silica surfaces by copper CVD using a chemical affinity pattern created by **gas phase** silylation and UV exposure)
IT 7440-50-8, Copper, uses 7631-86-9, Silica, uses
(selective metalization of silica surfaces by copper CVD using a chemical affinity pattern created by **gas phase** silylation and UV exposure)

L24 ANSWER 4 OF 4 HCAPLUS COPYRIGHT 2007 ACS on STN DUPLICATE 4
ACCESSION NUMBER: 1993:173582 HCAPLUS Full-text

DOCUMENT NUMBER: 118:173582
TITLE: Mineral precursor for chemical vapor deposition of rhodium **metallic** films
AUTHOR(S): **Doppelt, Pascal**; Weigel, Valerie; Guinot, Philippe
CORPORATE SOURCE: Lab. Chim. Electrochim. Mater. Mol., ESPCI, Paris, 75231, Fr.
SOURCE: Materials Science & Engineering, B: Solid-State Materials for Advanced Technology (1993), B17(1-3), 143-6
CODEN: MSBTEK; ISSN: 0921-5107
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Di-μ-chloro-tetrakis(trifluorophosphine)dirhodium(I) was synthesized by using the method of Bennett and Patmore (1971) and was purified twice by sublimation. Decomposition reaction of the complex studied by Fourier transform IR spectroscopy in the vapor phase showed that no volatile species except the complex and PF3 were present in the **gas phase**. The mineral precursor was used to obtain Rh films by chemical-vapor deposition under mild conditions of <200° and pressure 3-10 Torr on Pyrex glass slides or NaCl substrates. The resulting smooth Rh films with a mirror-like surface were characterized by x-ray diffraction to be face centered cubic Fm3m with a = 3.8062 Å. According to TEM 800 + 50 +50 Å single crystals are present. Neither P nor F atoms were detected, but a significant amount of Cl atoms was present in the films identified as RhCl3.

CC 56-6 (Nonferrous Metals and Alloys)
ST rhodium CVD mineral complex precursor
IT Vapor deposition processes
(chemical, of rhodium films, mineral complex precursor for)
IT 7440-16-6, Rhodium, uses
(CVD of, mineral complex precursor for)
IT 14876-98-3
(precursor of, for CVD of rhodium films)


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=> d his nofile

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                  29965-97-7/BI OR 675200-66-5/BI OR 675200-67-6/BI OR
                  675200-68-7/BI OR 675200-69-8/BI OR 675200-70-1/BI OR
                  675200-71-2/BI OR 675200-72-3/BI OR 7440-21-3/BI OR
                  7440-22-4/BI OR 7440-50-8/BI)
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L4                STR L3
L5            12 SEA SSS SAM L4
L6           237 SEA SSS FUL L4
L7             6 SEA ABB=ON  PLU=ON  L2 AND L6
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L9                STR L4
L10           12 SEA SUB=L6 SSS SAM L9
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L13            4 SEA ABB=ON  PLU=ON  L7 NOT L11

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L15           29 SEA ABB=ON  PLU=ON  L12

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L16            0 SEA ABB=ON  PLU=ON  L12 AND MEDLINE/LC
L17            0 SEA ABB=ON  PLU=ON  L12 AND BIOSIS/LC
L18            0 SEA ABB=ON  PLU=ON  L12 AND EMBASE/LC
L19            0 SEA ABB=ON  PLU=ON  L12 AND DRUGU/LC


     FILE 'EMBASE, BIOSIS, MEDLINE, DRUGU, HCAPLUS, JICST-EPLUS, JAPIO,
     WPIX, SCISEARCH, LIFESCI' ENTERED AT 09:37:23 ON 24 JAN 2007
L20          170 SEA ABB=ON  PLU=ON  DOPPELT, P?/AU
L21           15 SEA ABB=ON  PLU=ON  L20 AND GAS(A) PHASE?
L22            7 SEA ABB=ON  PLU=ON  L21 AND METALLIC?

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L23           28 SEA ABB=ON  PLU=ON  L15 NOT L1

     FILE 'HCAPLUS, WPIX, SCISEARCH' ENTERED AT 09:50:41 ON 24 JAN 2007
L24            4 DUP REM L1 L22 (4 DUPLICATES REMOVED)
                    ANSWERS '1-4' FROM FILE HCAPLUS
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